The Z-Bot Jog Dial II

The Z-Bot Jog Dial II is a USB jog pendent controller developed to work in conjunction with the popular Mach3 CNC control software. It is supplied with an installation disc that contains a Mach3 custom plug-in. The Jog Dial II is highly flexible, easy to use, requires minimal configuration, and does not use any parallel port pins.

Z-Bot Jog Dial Contents

The following contents are included with the Z-Bot Jog Dial II:

- Jog dial with integrated USB cable.
- Software installation disc.

Tools Required

PC with Mach3 installed.

Installing the Z-Bot Jog Dial II

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Check the release of Mach3 you are running. Z-Bot recommends Release 2.63 or higher. Ideally, upgrade to the current "lock down" release available at the Artsoft website www.machsupport.com. Find the release level under "Help->About Mach3 Controller(top menu of the main screen of Mach3).

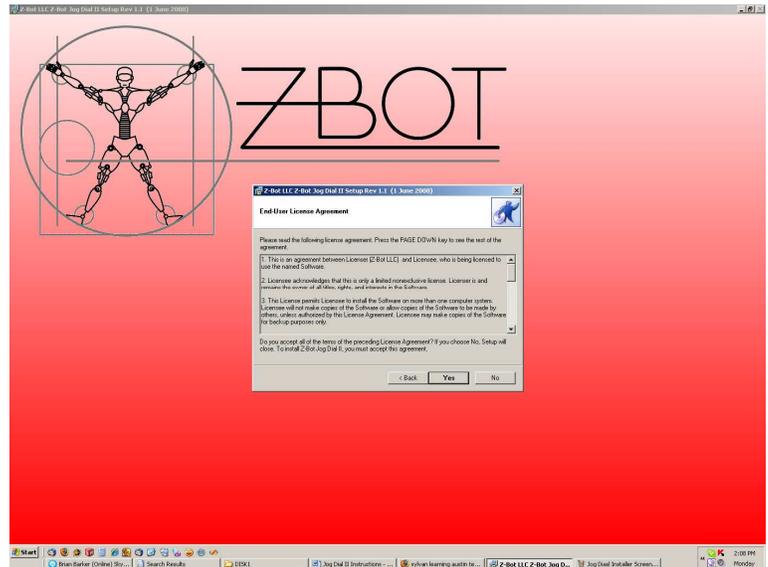1. Insert the CD entitled "Installation Disc".
   If the installation does not start automatically, open the disc and double click "Setup.exe"

2. The "Z-Bot Welcome" screen should appear.
   Click "Next"

3. Read and accept the End-User License Agreement by clicking on "YES."

4. The installation folder defaults to "Mach3" as does the original Mach3 installation. If Mach3 is installed to a different folder location, navigate to, and select it here. Otherwise, click "NEXT".
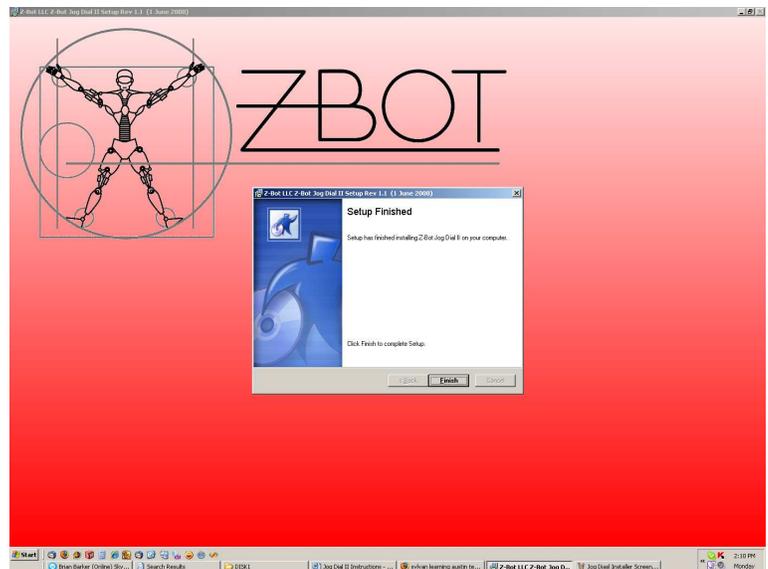

5. Click "NEXT." The required files will be copied to the Mach3 installation folders and subfolders.
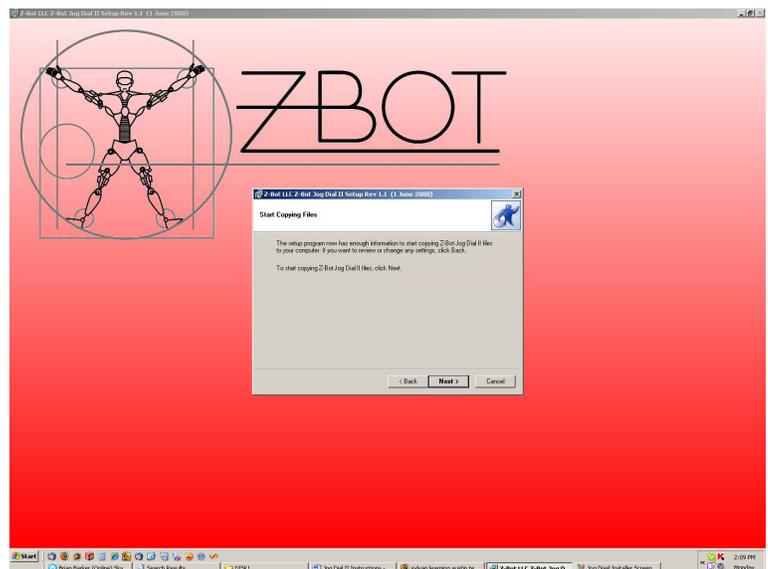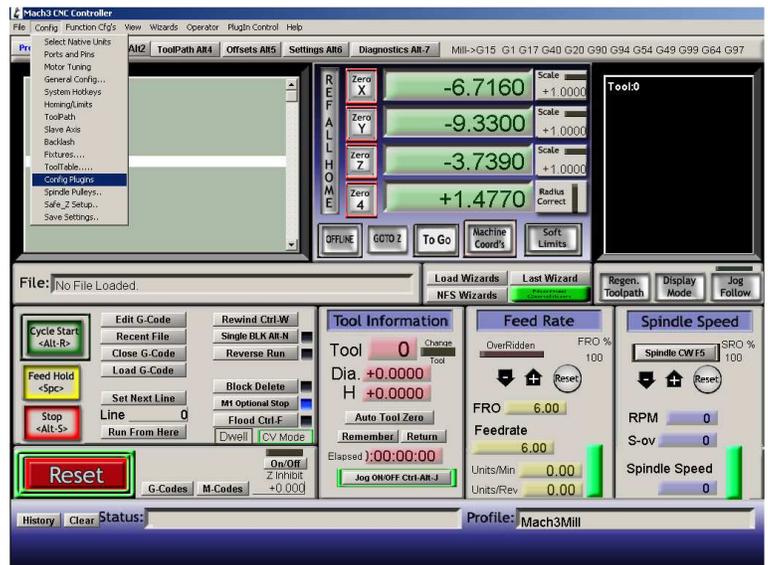
6. The "Installing Z-Bot Jog Dial II" screen will display while the files are being copied. This should only take a few seconds.
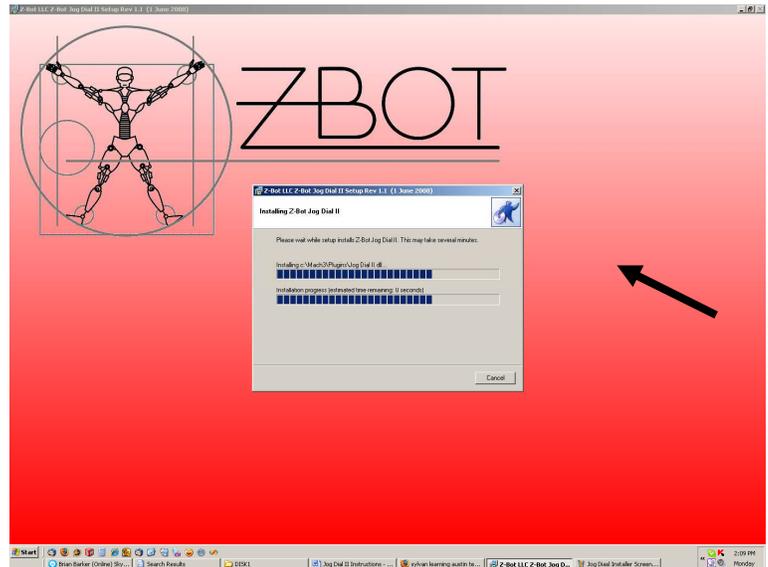
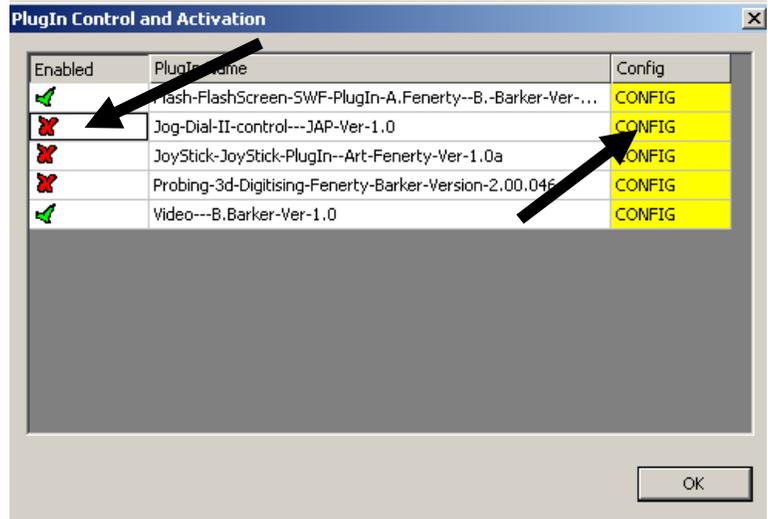7. Software installation is now complete. Click "Finish" to return to the desktop.

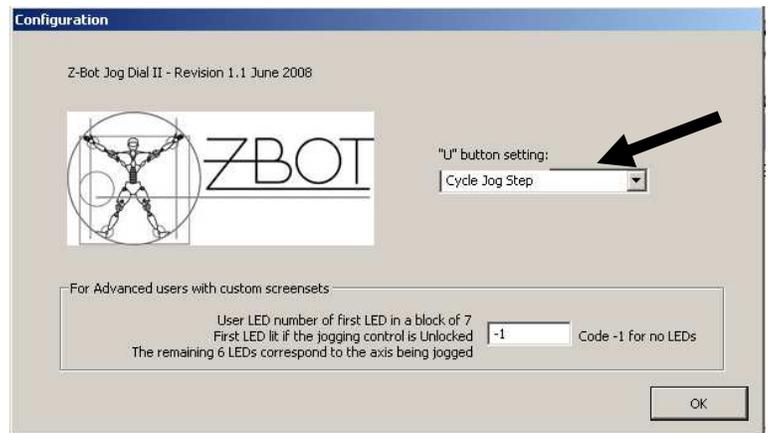8. Start Mach3. Go to the Config->Config Plugins menu.

9. Enable the Jog Dial II, by clicking on the red X. Make sure it changes to a green check mark.

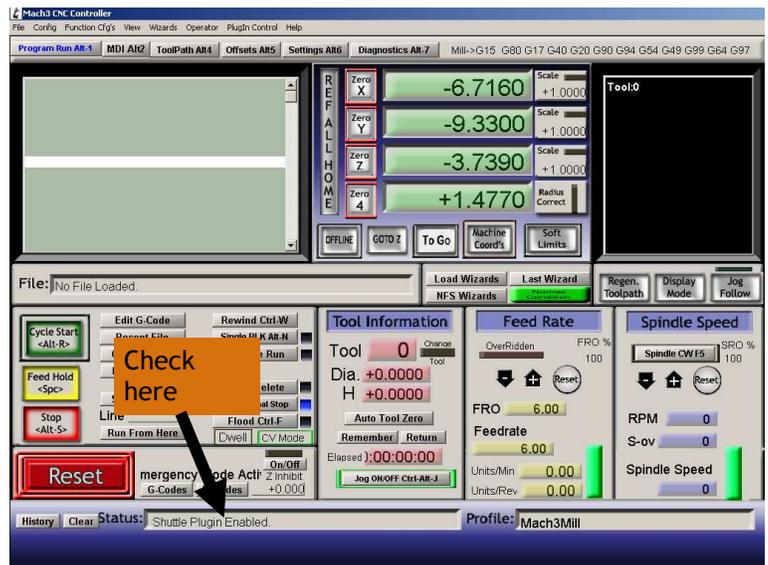   Click "CONFIG"

10. The first four buttons on the jog dial are configured to the X,Y,Z,and A axis respectively. The fifth button labeled "U" can be user configured from the drop down list.
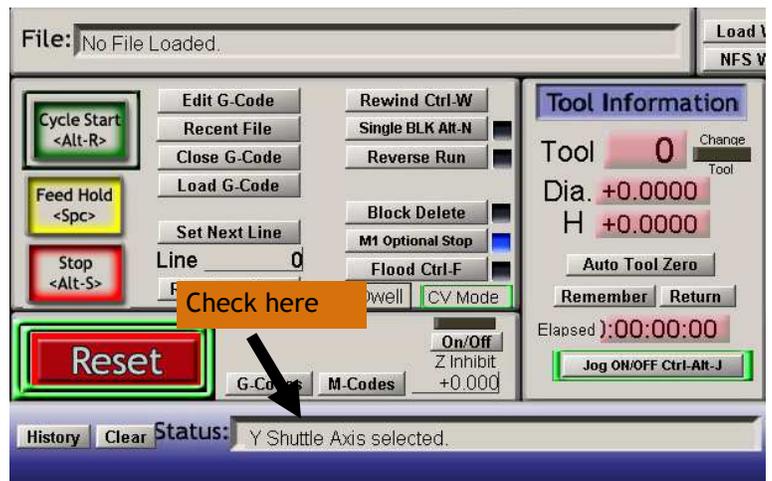   Click "OK" to apply changes.

11. IMPORTANT: Shut down Mach3!.

12. Plug the Jog Dial into an available USB port. Restart Mach 3.

13. Look for the message "Shuttle Plugin Enabled" in the Status box.

Using the Z-Bot Jog Dial II

1. Select an axis to jog by pressing the appropriate button. A message in the Status box in the lower left hand corner of the main Mach3 screen will indicate the selected axis as shown.


Outer dial

Inner dial

Axis select buttons

File: No File Loaded.

Load
NFS

Cycle Start <Alt-R>
Feed Hold <Spc>
Stop <Alt-S>

Edit G-Code
Recent File
Close G-Code
Load G-Code
Set Next Line
Line   0

Rewind Ctrl-W
Single BLK Alt-N
Reverse Run

Block Delete
M1 Optional Stop
Flood Ctrl-F
owell   CV Mode

Check here

On/Off
Z Inhibit
+0.000

Reset
G-Codes   M-Codes

Tool Information
Tool   0   Change Tool
Dia. +0.0000
H +0.0000
Auto Tool Zero
Remember   Return
Elapsed):00:00:00
Jog ON/OFF Ctrl-Alt-J

History   Clear   Status: Y Shuttle Axis selected.

2. Rotate the outer dial to the right to jog in the "+" direction. Rotate the outer dial to the left to jog in the "-" direction. The further the dial is turned from center, the faster the jog. Maximum speed is the jog rate set in Mach3. Let the dial spring back to the center position to stop the jog.

3. The inside dial has detents, or "clicks." Each click to the right will jog up one "Cycle Jog Step" increment as configured in Mach3. Conversely, each click to the left will jog down one step. To see the step increment setting, hit the "TAB" key, and the graphic on the right will appear. To change the setting,

either hit the "Cycle Jog Step" button on the screen, or configure the "U" button on the jog dial to "Cycle Jog Step". It is common practice to get close to the desired location with the outside dial, and then switch to the inside dial for final positioning.
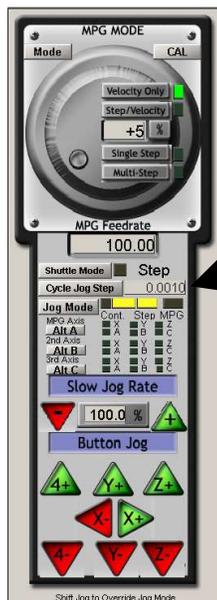
4. The Jog Dial II is maintenance free. However, make sure it is kept in a safe place. Do not expose the jog dial to chips or coolant from the milling process. Keep it dry and clean and it will deliver years of trouble free service.