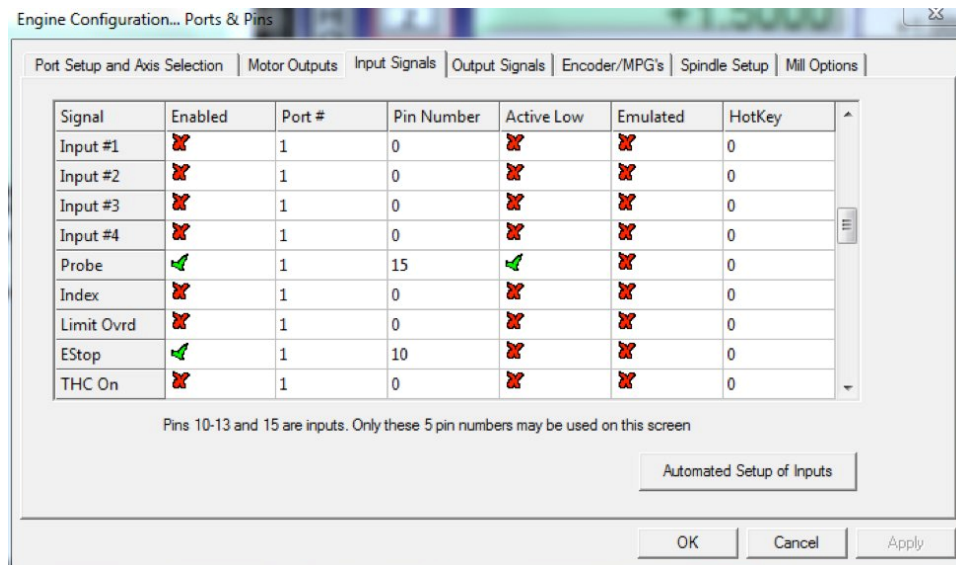


Using the Auto Z Touch Plate with Mach3

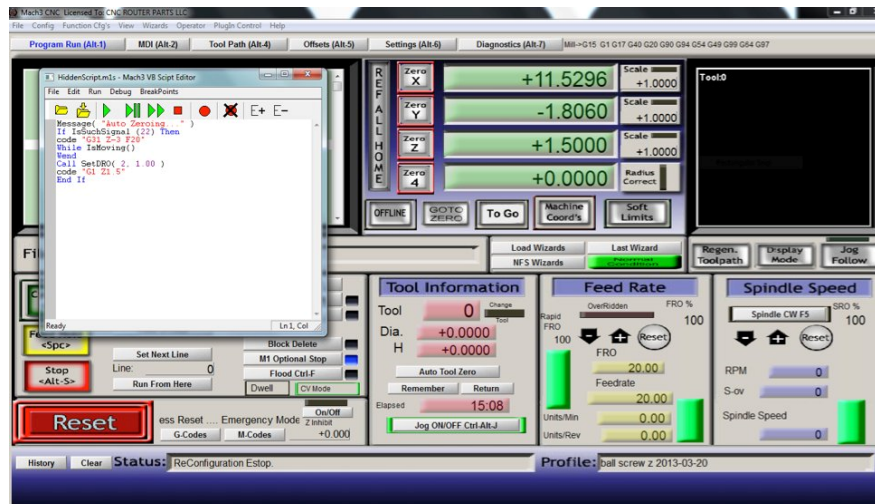
Setup of the Auto Z Touch Plate is fairly straightforward:

1. Plug the unit in.
 - a. For a Pre-wired Nema 34 system, just connect the two leads on the unit to "Signal" and "Ground" on one of the 3 pin connectors supplied with your panel, and plug into the red input signal board.
 - b. For a DIY system based on the PMDX-126 breakout board, just connect the two leads to an input pin and a common on J11.
 - c. For a G540 based system, you will need to wire one of the leads to an available input (pins 1 through 4 on the G540), and the other lead to the G540 power supply common (V-, on pin 12 of the G540).
2. Set up the input pin for the "probe".

We need to have it configured as an active low input, and we need to use an available open input. The example below shows pin 15 being used, but if you are already using pin 15 for something else (such as a limit switch or estop), you will need to use another available input. There are 5 available inputs on a parallel port – 10,11,12,13 and 15. Pin 15 is mapped to the estop for the G540, and pin 10 is mapped to the estop on a PMDX-126 system, so these may not be available depending on your situation.



3. Add the Visual Basic code to the "Auto Tool Zero" button
 - a. Go to the Operator menu and select "Edit Button Script"; the configurable buttons on the page will start flashing.
 - b. Click on the "Auto Tool Zero" button; this will bring up a window with code you can edit.



- c. Copy the code below into the editor (replacing any existing code):

```

Message( "Auto Zeroing..." )
If IsSuchSignal (22) Then
code "G31 Z-3 F20"
While IsMoving()
Wend
Call SetDRO( 2, 1.00 )
code "G1 Z1.5"
End If
  
```

- d. Save the file and exit the editor, and then restart Mach3.