

Setting up the speed controller program

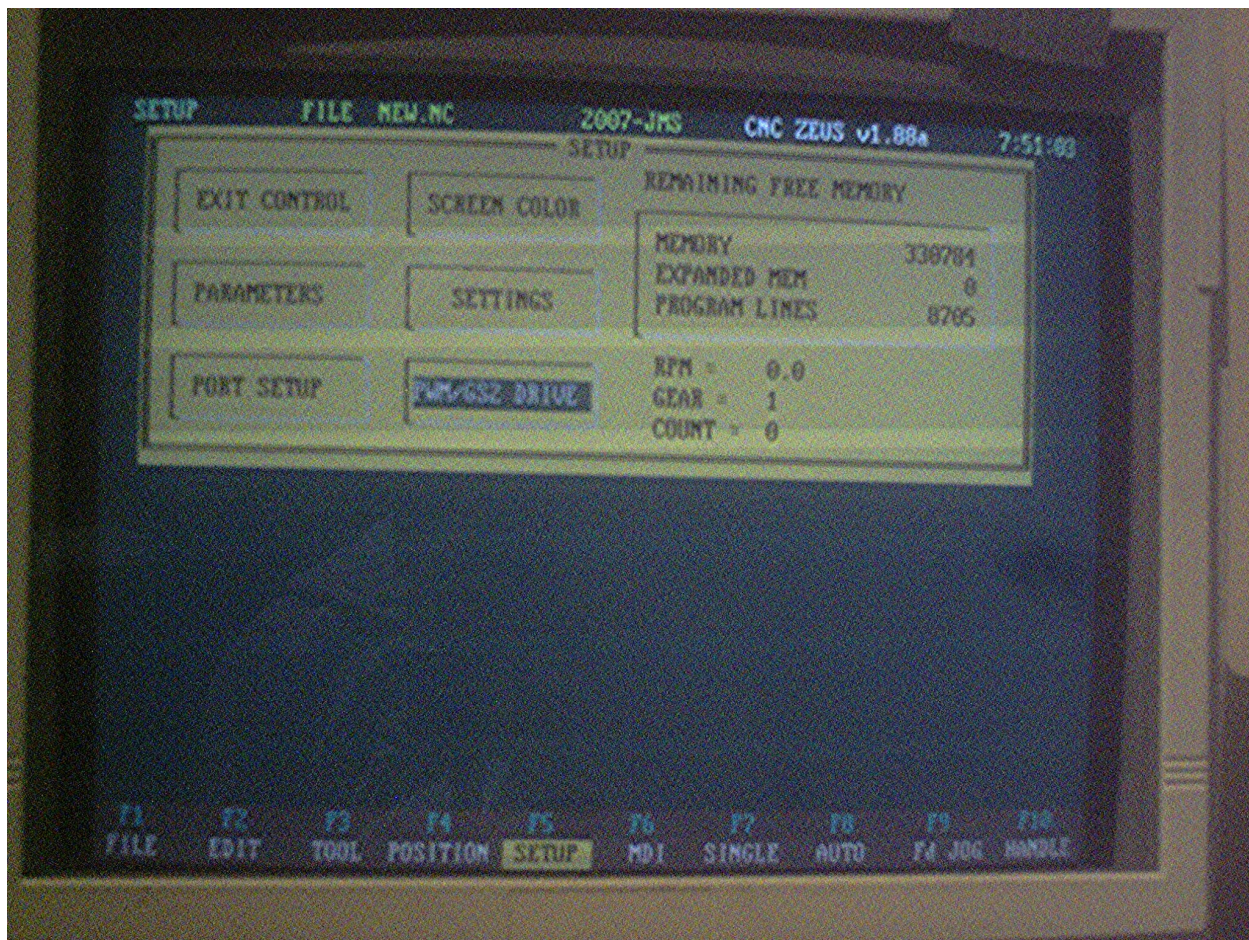
The speed controller will work from any CNC program having a PWM (pulse width modulation) function such as Mach3or4 and Zeus.

Zeus is an excellent CNC program which runs in read DOS mode on just about any computer. For this I use a P2 which was loaded with DOS from floppies and then NT4 was installed, NT then allows you to go into DOS if needed on bootup. For those not familiar with DOS I will run though the steps needed to set up speed control.

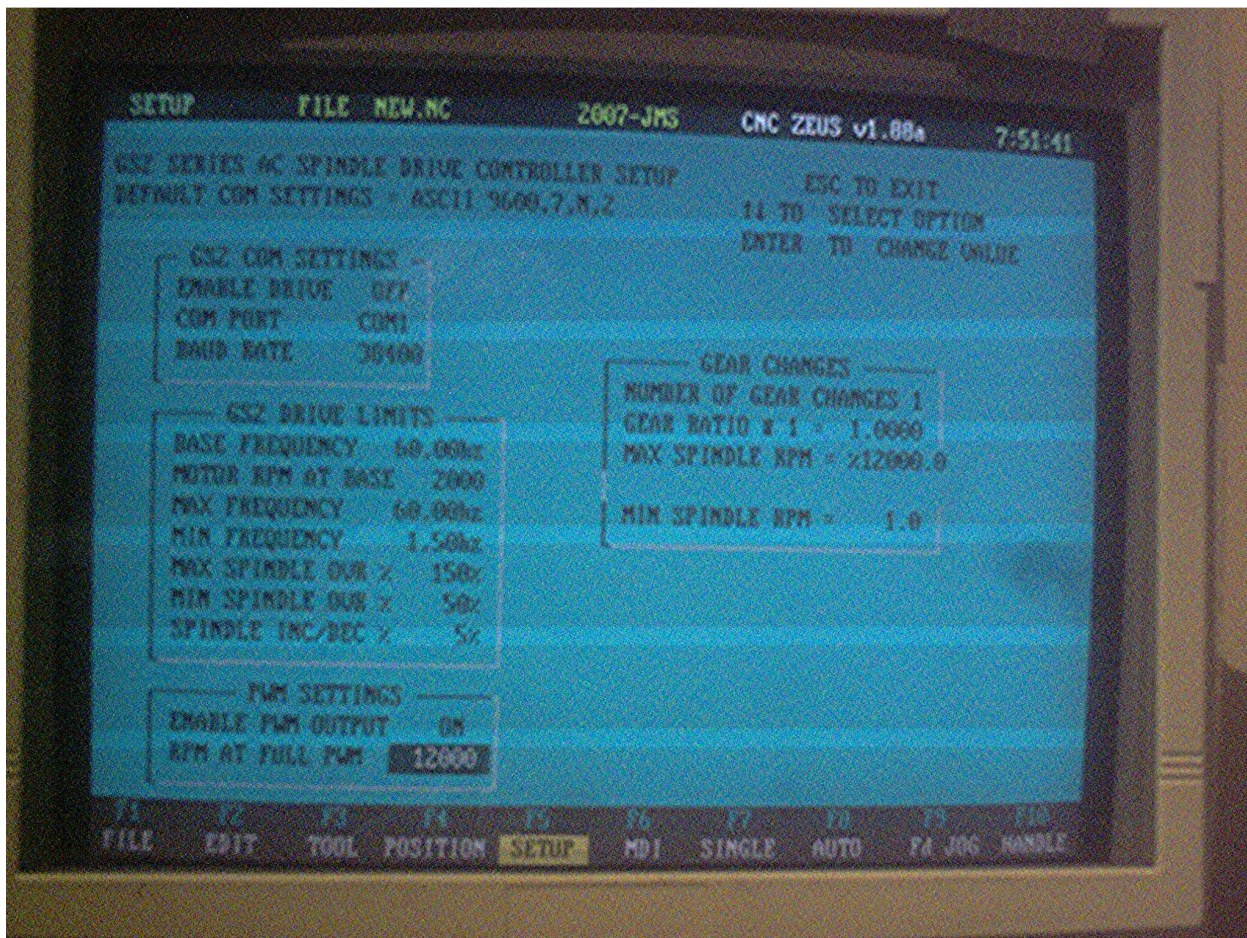
When you go into DOS the computer will show C:\ , you type zeus\zdemo.exe then newline and the Zeus screen appears.



Operate F5 function key for setup.



Use the arrow keys to select PWM/GS2 drive



Set the gear changes to 1 and MAX speed to 12000RPM.

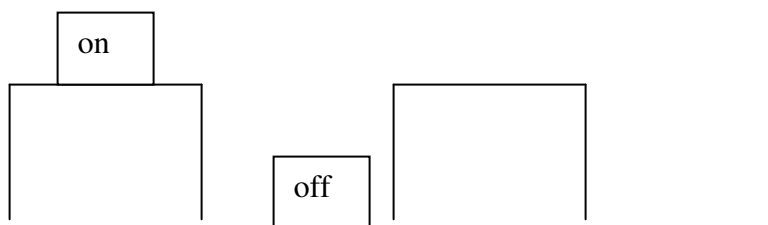
Set PWM output to ON. A speed setting is also sent out from COM1 if you have a microcontroller attached. I am glad however that the author has held on to the PWM feature it simplifies life a lot.

You do not have to worry about setting the port pin PWM appears on pin 17 of the parallel port and Zeus finds the parallel port on your machine.

Escape from this screen and operate function F6 MDI .



S code entries can be made eg S1000 is 1000RPM these change over when newline is pressed. The output from PIN 17 is a 5v square wave whose mark/space ratio is set by the S code.



With max speed set to 12000RPM this should give 6000RPM