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Servo ON/OFF

Summary: It is necessary to have the following 4 Software PLC commands: __HANDLER_INIT to start the servo when the myCNC software is turned on, __HANDLER_EXIT to turn the servo off when the software is shut down, __HANDLER_SERVO_ON to manually turn on the servo, and __HANDLER_SERVO_OFF to manually turn it off. This is done through the use of the 60000 and 60001 global variables.

The Servo ON and Servo OFF commands allow the user to create an automatic PID ON/OFF (for example, when opening/closing the myCNC software), as well as a manual set of buttons or commands to turn on and off the servo motor(s).

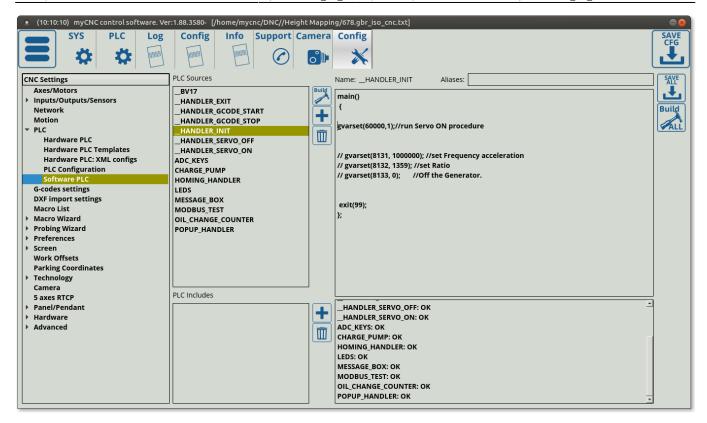
The automatic turning on and off of the servo motor on software start/close can be done by going into Settings > Config > PLC > Software PLC and creating __HANDLER.INIT and __HANDLER_EXIT files (if they do not yet exist) with the following code:

HANDLER INIT.PLC

```
main()
{
  gvarset(60000,1); //turn Servo PIDs On
  exit(99);
};
```

HANDLER EXIT.PLC

```
main()
  {
   gvarset(60001,1); //turn Servo PIDs Off
   exit(99);
};
```



As can be seen, writing 1 to the register 60000 will turn the PIDs on, while writing 1 to register 60001 will turn the servo PIDs off. This will also be used in manual servo control, where a button can be utilized to quickly switch the motor on and off.

In order to do so, it is necessary to have the __HANDLER_SERVO_ON and __HANDLER_SERVO_OFF commands in the Software PLC section. These can be extremely similar to the INIT and EXIT commands shown above, as they effectively perform the same task (differences begin to crop up only when additional actions are required on servo startup, or on program start, etc). By default, the following code is required for each respective PLC command:

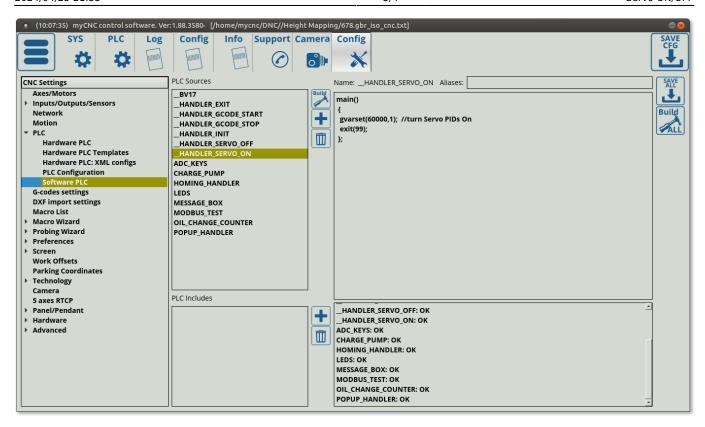
HANDLER SERVO ON.PLC

```
main()
{
   gvarset(60000,1); //turn Servo PIDs On
   exit(99);
};
```

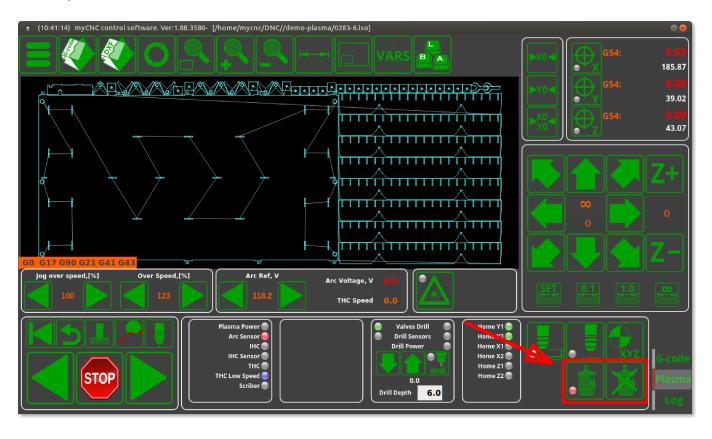
HANDLER SERVO OFF.PLC

```
main()
{
  gvarset(60001,1); //turn Servo PIDs Off
  exit(99);
};
```

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The manual code allows to use buttons to turn on and off the servo motor such as seen in the X1366P Plasma profile:



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