



# How To Invert Limit Switches

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```
WorkBee CNC Machine x +
← → ↻ Not secure | 192.168.141/Files/System
x 0:/sys/config.g
;
; DO NOT CHANGE ANY OF SETTINGS BELOW
; TO MAKE A CHANGE, COPY THE LINE OF CODE, PASTE IT INTO customconfig.g. THE CHANGE CAN THEN BE MADE IN customconfig.g
; ANY ADDITIONAL SETTINGS SHOULD BE PUT IN customconfig.g

; General preferences
M453                               ; Put the machine into CNC Modes
M550 PWorkBee CNC Machine         ; Set machine name
G90                               ; Set absolute coordinates

; Network
M586 P0 S1                         ; Enable HTTP
M586 P1 S0                         ; Disable FTP
M586 P2 S0                         ; Disable Telnet

; Configure Drives
M569 P0 S0                         ; Drive 0 goes forwards
M569 P1 S1                         ; Drive 1 goes forwards
M569 P2 S0                         ; Drive 2 goes forwards
M569 P3 S1                         ; Drive 3 goes forwards
M584 X0 Y1:3 Z2                   ; Apply drive mapping to axes

; Configure Axes
M92 X400 Y400 Z400                ; Set steps per mm
M350 X16 Y16 Z16 I1               ; Configure microstepping
M566 X500 Y500 Z500              ; Set maximum instantaneous speed changes (mm/min)
M203 X2500 Y2500 Z2500           ; Set maximum speeds (mm/min)
M201 X150 Y150 Z150              ; Set accelerations (mm/s^2)
M906 X2400 Y2400 Z2400 I100      ; Set motor currents (mA)

; Configure Axis Limits
M208 X0 Y0 Z0 S1                  ; Set axis minima
M208 X550 Y520 Z94 S0            ; Set axis maxima

; Configure Endstops
M574 X2 Y2 Z2 S1                  ; Set active low endstops

; Other Settings
M140 H-1                          ; Disable heated bed
M564 S1 H1                         ; Disable jog commands when not homed
M911 S21.0 R23 P"G91 G1 Z3 F1000" ; Configure power loss resume
M501                               ; Load Stored Parameters
M98 Pcustomconfig.g              ; Execute custom config settings
```

## Step 1 — Invert Limit Switches

```

DO NOT CHANGE ANY OF SETTINGS BELOW
; TO MAKE A CHANGE, COPY THE LINE OF CODE, PASTE IT INTO customconfig.g. THE CHANGE CAN THEN BE MADE IN customconfig.g
; ANY ADDITIONAL SETTINGS SHOULD BE PUT IN customconfig.g

; General preferences
M653                               ; Put the machine into CNC Modes
M559 P0 S1                          ; Set machine name
G90                                   ; Set absolute coordinates

; Network
M559 P0 S1                          ; Enable HTTP
M086 P1 S0                          ; Disable FTP
M086 P2 S0                          ; Disable Telnet

; Configure Drives
M569 P0 S0                          ; Drive 0 goes forwards
M569 P1 S1                          ; Drive 1 goes forwards
M569 P2 S0                          ; Drive 2 goes forwards
M569 P3 S1                          ; Drive 3 goes forwards
M044 X0 Y1:3 Z2                    ; Apply drive mapping to axes

; Configure Axes
M02 X000 Y000 Z000                 ; Set steps per mm
M050 X16 Y16 Z16 I1               ; Configure microstepping
M060 X3000 Y3000 Z500             ; Set maximum instantaneous speed changes (mm/min)
M091 X25000 Y25000 Z25000         ; Set maximum speeds (mm/min)
M091 X150 Y150 Z150               ; Set accelerations (mm/s^2)
M090 X24000 Y24000 Z24000 I100    ; Set motor currents (mA)

; Configure Axis Limits
M088 X0 Y0 Z0 S1                  ; Set axis minima
M080 X50 Y50 Z0 S0                ; Set axis maxima

; Configure Endstops
M574 X2 Y2 Z2 S1                  ; Set active low endstops

; Other Settings
M140 H 1                          ; Disable heated bed
M568 S1 H1                        ; Disable Jog commands when not homed
M011 S21:0 R23 P*001 G1 Z3 F1000* ; Configure power loss resume
M081                               ; Load Stored Parameters
M98 Customconfig.g                ; Execute custom config settings

```

```

; ADD ANY CUSTOM SETTINGS BELOW

; Configure Endstops
M574 X2 Y2 Z2 S0                  ; Set active low endstop

```

**i** If your limit switches are showing as 'Triggered' when they are not physically pressed, but change to triggered when pressed, please complete the steps below.

- Under File Management > System open Config.g and Copy the Configure Endstops information.
- Return back to System and open Customconfig.g and paste in the Lines as follows ; Configure Endstops M574 X2 Y2 Z2 S0. Changing the S1 to S0 to reflect NO Terminals or vice-versa.
- Once complete, Press 'Save' and reboot by pressing the Emergency Stop Button.

**i** You can have separate configurations for each axis by breaking each axis out onto it's own line. For example:

**i** M574 X2 S0

**i** M574 Y2 S1

**i** M574 Z2 S0

Thanks for following the guide. Any issues, please contact us!