## Limit Switch Testing John Champlain 2/17/2021

Here is a simple and easy way to test the action of limit switches using PicSender.

- 1 Start up PicSender and connect to your controller. Home (\$H) the machine if so enabled.
- 2 Click and release the "?" button, and this message (or similar) should be displayed in the "Messages" box.

| SH | Reference | Home | SX | Kill Alarm Lock | Current Status | Commands |

3 – Manually actuate and hold a limit switch, and click the "?" button again, and this message will be displayed.



4 – The "Pn:Y" indicates that one of the Y limit switches was actuated. If an "X" axis switch is actuated, then "Pn:X" will display. And for a "Z" axis switch, "Pn:Z" will be displayed.

A failure of the "Pn:\_" message to display with the above procedure indicates that a switch may be either faulty, or has a wiring error.

If two or more limit switches are actuated when the "?" button is clicked, then a letter for each actuated switch will be displayed (ex: "Pn:XY" or "Pn:XYZ").

## Please note:

- 1 Grbl will not indicate whether or not the limit switches are plus (+) or minus(-).
- 2 If switches are wired in a NO (normally open) configuration, then the grbl setting \$5 should be \$5=0, and if wired in a NC (normally closed") configuration, then \$5 should be \$5=1. Using switches wired with mixed (NO and NC) configurations is not allowed.