

Electronic handwheel for STB5100 Operating instruction



Please install an emergency stop before use and ensure that the emergency stop switch can work normally. In case of emergency, you can press the emergency stop button or unplug the USB cable. Please strictly follow the instructions and warnings to use this product, otherwise any direct / indirect personal injury, our company does not assume any responsibility.

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Features:

1. The electronic hand wheel use a metal shell and 100PPR high-quality encoder, which has good feel when turning and is easy to operate;
2. Support for 5-axis manual control, the hand wheel joint has been welded, and it can be used by directly inserting on the STB5100 control card interface;
3. The speed is divided into three gears: X1 X10 X100. The manual running speed can be controlled by the hand wheel turning speed;
4. Cable natural length is 1.8m, can be stretched to about 3.5m.

Indicator description:

Mark	Description
OFF	MPG OFF
X	Select operation X axis
Y	Select operation Y axis
Z	Select operation Z axis
4	Select operation 4 axis
5	Select operation 5 axis
6	Select operation 6 axis(invalid)
X1	Low speed indicator LED
X10	Medium speed indicator LED
X100	High speed indicator LED

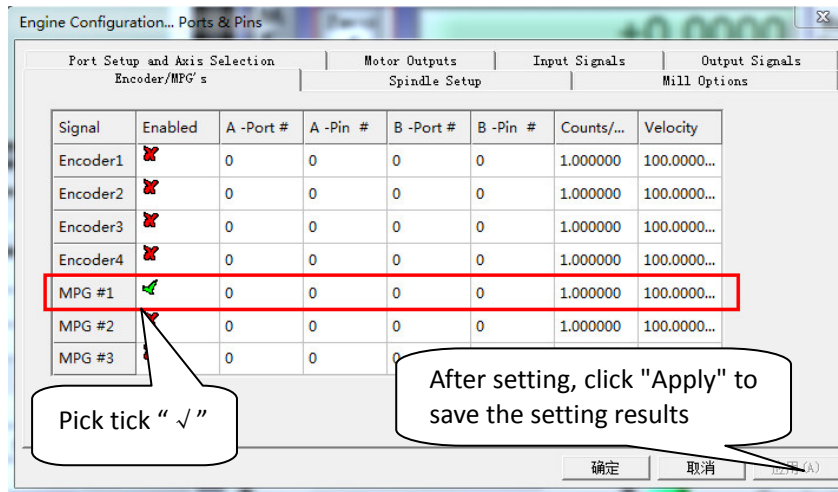
MPG connection:

Plug the DB15 connector into the USB control card and tighten the screws to complete the connection.

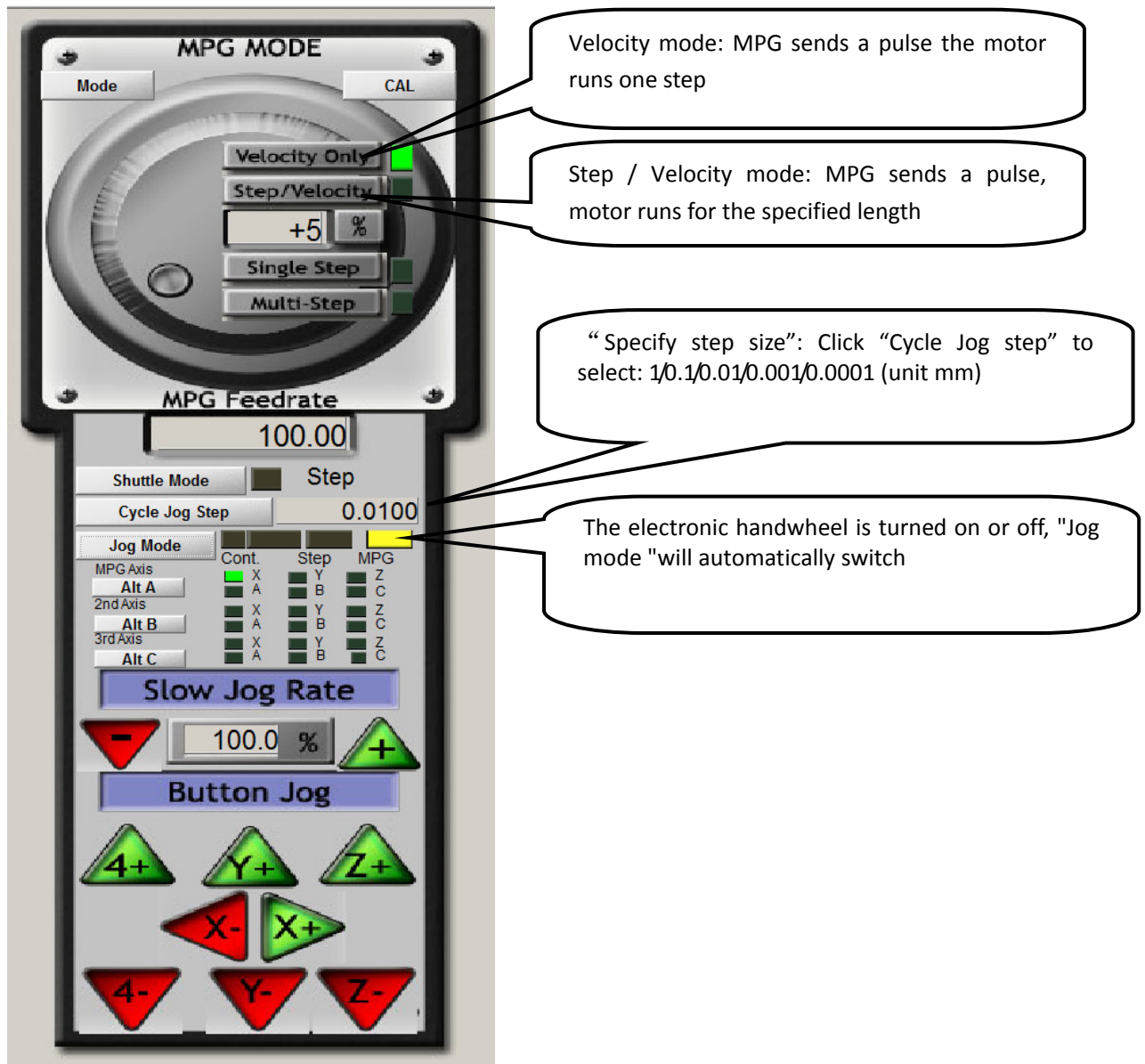
MPG configuration:

MPG does not need to install the driver, mach3 needs to be configured as shown:

The Mach3 Menu => Config =>Ports and Pins=>Encoder/MPG'S

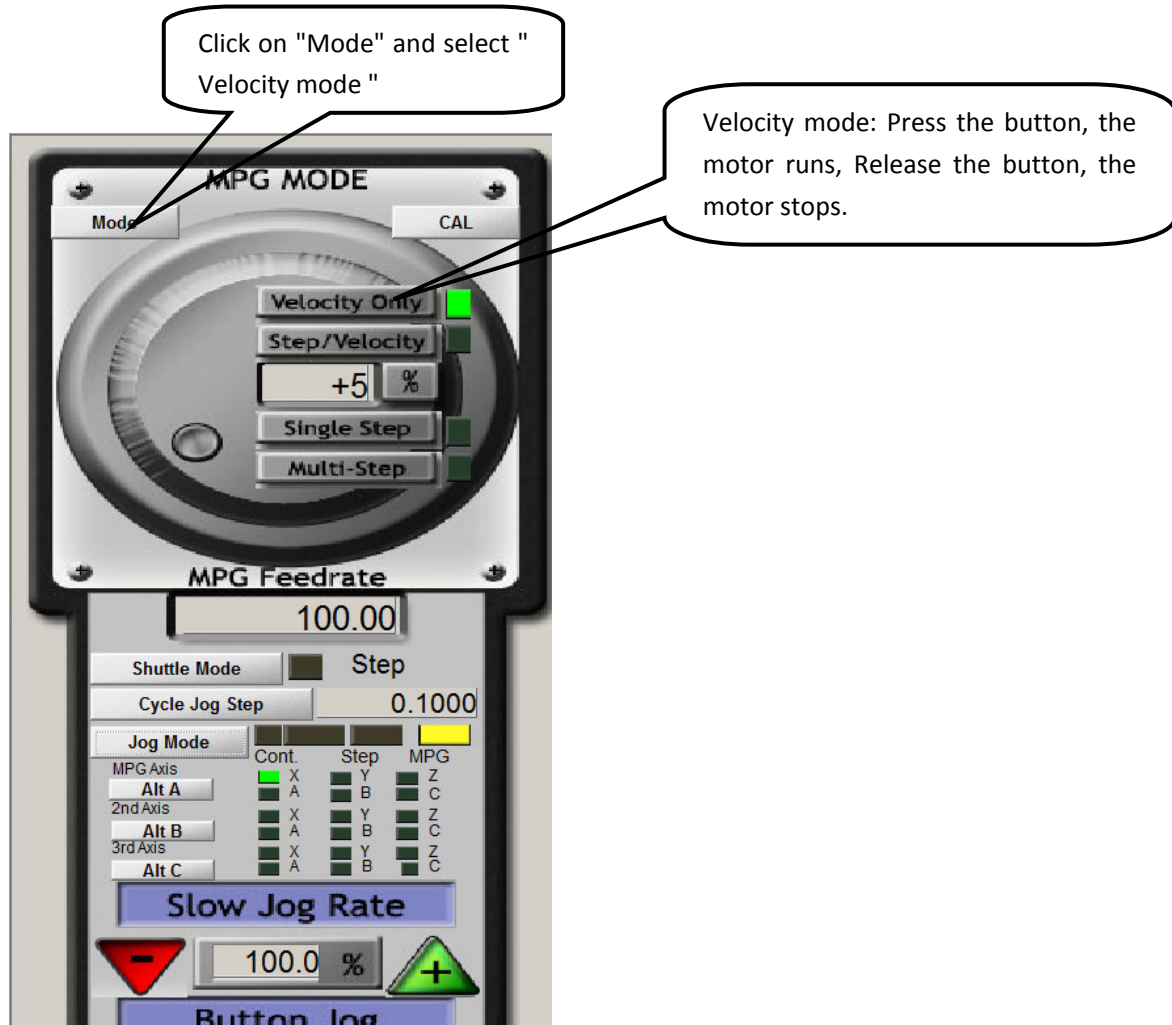


Press the "Tab" key on your keyboard, to bring up the "MPG MODE", MPG mode can be selected or view MPG status.



Velocity mode operation:

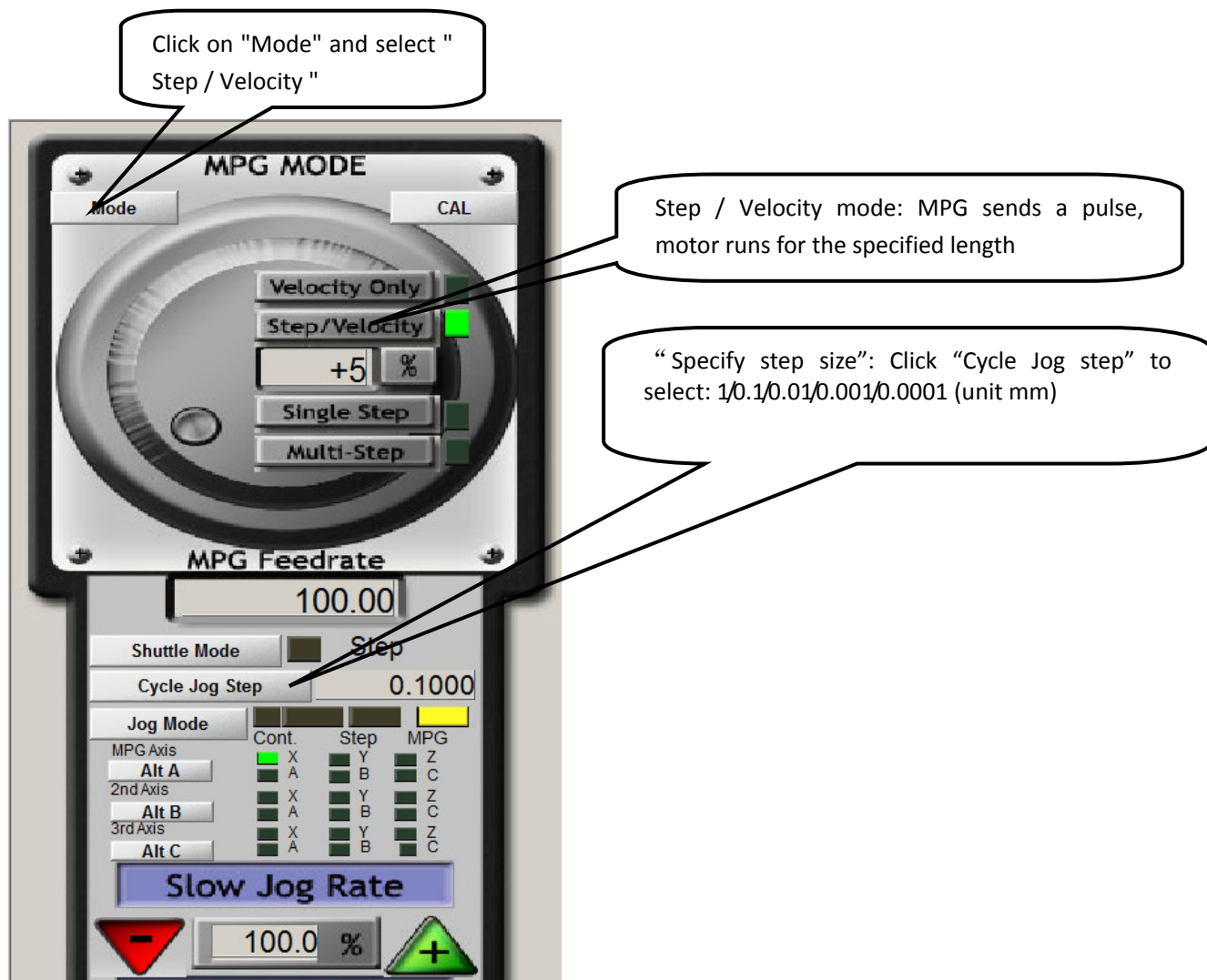
Press the "Tab" key on your keyboard, to bring up the "MPG MODE" , Click on "Mode" and select " Velocity mode ":



Operation: Turn on the MPG switch, select the speed gear you want, Rotating handwheel, motor running.

Step/ Velocity mode operation:

Press the "Tab" key on your keyboard, to bring up the "MPG MODE" , Click on "Mode" and select " Step/ Velocity mode operation " , Click "Cycle Jog step" to select Specify step size (1/0.1/0.01/0.001/0.0001mm) .



Note: Select "Step / Velocity" mode, the operation will have a feeling of delay, Handwheel stops rotating, the motor will continue to run. Explanation: axis running distance = number of received pulses * X (X = 1 / 0.1 / 0.01 / 0.001/0.0001), the motor will not stop running until the pulse number is completely converted into the running distance. The larger the X number, the higher the gear position, the more obvious the delay. Select "Step / Velocity" mode, please operate with caution.