



适用于MACH3系统
Application system: MACH3

MACH3无线电子手轮

The MACH3 wireless MPG instructions
for the MACH3 system

说明书



型号
MODEL

WHB04B-4: 4轴，无线电子手轮

WHB04B-4: 4-axis, Wireless manual pulse generator

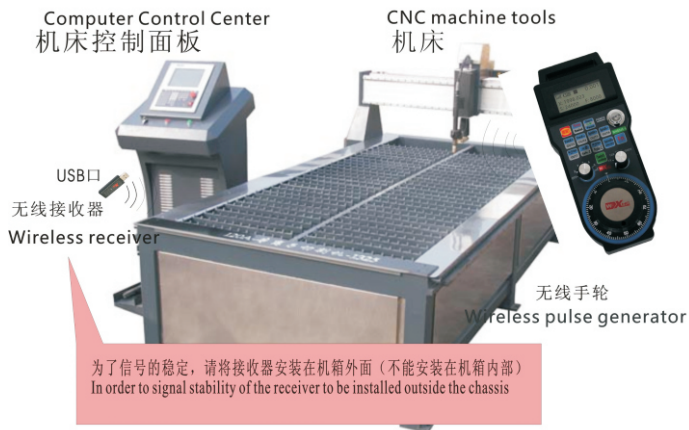
WHB04B-6: 6轴，无线电子手轮

WHB04B-6: 6-axis, Wireless manual pulse generator

● 特点 Characteristic

- 采用433MHZ,ISM无线RF传输技术，发射功率10DB，接收灵敏度-98DB
- 具有64个跳频频道，每个频道间隔1MHZ
- 智能无线技术，实现自动跳频，自动节约功耗，自动ID码学习
- 采用跳频传输，抗干扰能力强；
- 跳频传输技术，同一个房间，能支持64套设备，同时使用，相互不受影响
- 100PPR电子手轮功能
- 显示X, Y, Z, A, B,C轴的机械坐标和工件坐标
- 显示主轴转速值，加工进给速度值
- Radio frequency : 433MHZ,ISM,the Tx power is 10DB and the RX sensitivity is -98DB
- The RF has 64 channels,the channel gap is 1Mhz
- Using frequency hopping, stable and reliable
- Hopping transmission technology, can support 64 sets of equipment, each other is not affected
- 100PPR manual pulse generator
- LCD Display: machine coordinates and workpiece coordinates X, Y, Z, A, B, C-axis
- LCD Display: Spindle speed value, processing feed rate value





注意：为了信号的稳定，请将接收器安装在机箱外面（不能安装在机箱内部）

In order to signal stability of the receiver to be installed outside the chassis

① 插入USB接收器，等待驱动自动安装完成。

Insert the USB receiver, wait for the automatic driver installation is completed.

② 在MACH3安装目录下有个“PlugIns”文件夹,然后把驱动文件（在光盘里边）XHC-ShuttlePro.dll拷贝到此文件夹\Mach3\PlugIns下。

The drivers (in the CD inside) XHC-ShuttlePro.dll copied to \Mach3 \ PlugIns.

③ 宏代码安装：

将光盘里macro文件夹下的所有文件拷贝到MACH3安装目录..\Mach3\macros\Mach3Mill下。

The all macro files (in the CD inside macro folder) copied to .. \ Mach3 \ macros \ under Mach3Mill.

④ 无线电子手轮，安装上2节AA电池，打开手轮的电源开关，就可以正常使用了。

Wireless MPG, install 2 AA batteries, turn on the power switch, you can normally use.

对应图标 Icon	功能 Function
	复位按钮 Reset
	<p>该按钮有2个功能：单独按下该按钮，实现停止功能。 当按下  +  :实现返回程序开始功能。</p> <p>The button has two functions: press the button alone: stop function. press  +  : Return to the program start</p>
	<p>启动/暂停功能。当正在运行的时候，按下，实现暂停功能；暂停的时候，按下该按钮，实现启动功能。</p> <p>Start / Pause function</p>
	<p>该按钮有2个功能：单独按下该按钮，实现进给速度增加功能。当按下  +  :实现输出口3打开或关闭功能。</p> <p>The button has two functions: press the button alone: Increasing the feed rate press  +  : Output 3 open or closed</p>
	<p>该按钮有2个功能：单独按下该按钮，实现进给速度减少功能。当按下  +  :实现输出口4打开或关闭功能。</p> <p>The button has two functions: press the button alone: Feed rate reduction press  +  : Output 4 open or closed</p>

● MACH3手轮按键功能说明 The MACH3 MPG key function

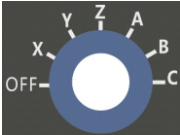

对应图标 Icon	功能 Function
	<p>该按钮有2个功能：单独按下该按钮，实现主轴速度增加功能。当按下 Fn + ：实现输出5打开或关闭功能。</p> <p>The button has two functions: press the button alone: Increasing spindle speed press Fn +  : Output 5 open or closed</p>
	<p>该按钮有2个功能：单独按下该按钮，实现主轴速度减少功能。当按下 Fn + ：实现输出6打或关闭功能。</p> <p>The button has two functions: press the button alone: Reduce spindle speed press Fn +  : Output 6 open or closed</p>
	<p>该按钮有2个功能：单独按下该按钮，实现回机械原点功能。当按下 Fn + ：实现输出7打或关闭功能。</p> <p>The button has two functions: press the button alone: Back to the mechanical origin press Fn +  : Output 7 open or closed</p>
	<p>该按钮有2个功能：单独按下该按钮，实现当前坐标除2，长按下超过2秒，实现当前坐标清0；当按下 Fn + ：实现Z轴回到安全点。</p> <p>The button has two functions: press the button alone: The current coordinates divided by 2, Press more than 2 seconds; coordinates cleared; press Fn +  Z axis go to a safe point.</p>

对应图标 Icon	功能 Function
	<p>该按钮有2个功能：单独按下该按钮，实现回工件原点功能 当按下  +  :实现Z轴对刀功能。</p> <p>The button has two functions: press the button alone: Back workpiece origin press  +  : Z-axis Probe function</p>
	<p>主轴开启/关闭功能</p> <p>Spindle on / off function</p>
	<p>功能键：先按下功能键不放，再按下其他键，实现组合键第2功能作用</p> <p>Function Keys: Press the function key, then press another key to achieve the second function of key combinations</p>
	<p>LCD显示的坐标切换：工件坐标和机械坐标显示切换操作display switching operation</p> <p>Coordinate switching LCD display: mechanical coordinate and workpiece coordinate display switching operation</p>

● 波段开关功能 Band switch function

波段开关对手轮功能起到控制作用，手轮的各种功能，通过波段开关的档位切换，而进行相应切换



to control the various function of the hand wheel through the band switch

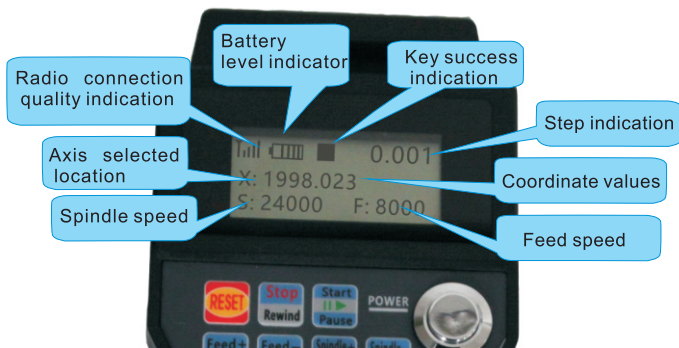
对应图标 Icon	功能 Function
	<p>轴选择波段开关：OFF位置，关闭电子手轮功能。 X,Y,Z,A,B,C:实现对应的X,Y,Z,A,B,C:6个轴选择功能。</p> <p>Axis selection band switch: OFF position to switch off MPG</p> <p>X, Y, Z, A, B, C: 6 axis selection function.</p>
	<p>倍率选择波段开关：</p> <p>1X位置：对应手轮移动为步进模式移动，移动单位0.001</p> <p>10X位置：对应手轮移动为步进模式移动，移动单位0.01</p> <p>100X位置：对应手轮移动为步进模式移动，移动单位0.1</p> <p>MPG位置：对应手轮移动为MPG模式</p> <p>在MPG模式下，用户可以根据自己需要，设置移动速度。</p> <div data-bbox="495 1103 626 1263">  </div> <p>Lead位置：对应模式为加工引导模式：通过手轮摇动，引导加工快慢</p>

● 波段开关功能 Band switch function

波段开关对手轮功能起到控制作用，手轮的各种功能，通过波段开关的档位切换，而进行相应切换

to control the various function of the hand wheel through the band switch

对应图标 Icon	功能 Function
	<p>selection speed:</p> <p>1X location: MPG corresponds to step mode Move, the Step Move unit 0.001</p> <p>10X location: MPG corresponds to step mode Move, the Step Move unit 0.01</p> <p>100X location: MPG corresponds to step mode Move, the Step Move unit 0.1</p> <p>MPG location: MPG corresponds to MPG mode Move</p> <p>In MPG mode , Users can set MPG speed.</p> <div data-bbox="482 627 612 787">  </div> <p>Lead location : Processing Lead mode;By shaking the MPG to change the processing speed</p>



说明：

按键指示：当按下按键，接收器接收到按键值后，该指示闪烁一下，表示按键操作成功。

倍率指示：当波段开关选择1X, 10X,100X,1000X的时候，对应LCD是指倍率值：0.001, 0.01, 0.1, MPG

轴选位置指示：轴选开关位置，对应LCD显示轴选。X表示X轴工件坐标，X1表示X轴机械坐标。

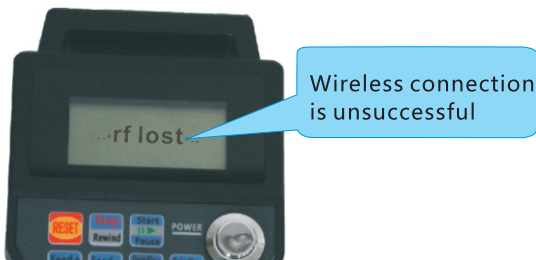
Explanation:

Key success indication: When you press the button, the receiver receives the key value, the indicator flashes about, indicating successful key operation.

Speed Indicator: When the band switch to select 1X, 10X, 100X, 1000X, The LCD display value: 0.001,0.01,0.1, MPG

Axis selected location: Axis selection switch position, LCD display axis selected.

X: X workpiece coordinate axis, 1X: X axis mechanical coordinate.



当无线MPG和USB接收器连接不成功（比如USB接收器没有插上电脑），则无线MPG的LCD会如下显示：

When the wireless USB receiver is connected MPG and unsuccessful (eg USB receiver does not plug in the computer), the wireless MPG's LCD will appear as follows:



成都芯合成科技有限公司

Chengdu XinHeCheng Technology Co.,Ltd

<http://www.cdxhctech.com>

如有印刷或翻译错误，望用户谅解。产品设计和规格如有变化，恕不另行通知。
此使用手册的出版日期为2016年2月。关于此日期后上市的产品驱动程序的变化，
请登录公司网站查看并更新，或与我们售后联系。