

适用干维宏系统 Application system: Ncstudio



WHB03-L 无线型, 最远距离40米 Wireless effective distance of 40 meters MODEL LHB03 有线型,5米USB线缆 USB shielded cable with 5 m

型号



●无线使用距离40米 Wireless effective distance of 40 meters

WHB03-L型

● 带5米USB屏蔽电缆 USB shielded cable with 5 m

LWHB03型



 备注:当低压指示灯亮的时候,表示电池电量快用完了,建议更换电池。
Note: When the Low voltage indicator LED light, the battery is completely, Proposed to replace the battery

		DC D	escription 直流电气特性 O
产品名称 Name		工作电流 Current	备注 Note
无线USB接收器 Wireless USB Receiver	4.5V ~ 5.0V	小于50mA Less than 50mA	
无线手柄 Wireless Handle		平均电流小于2mA Average Current Less than 2mA	2000MAH的2节电池能使用2个月 Use of time More than 2 months USE Two 2000MAH Battery

注意:无线手柄采用2节AA高容量电池.当低压指示灯亮的时候,表示电池电量快用完了,建议更换电池。

Note: Wireless Handle Need Two AA Battery, When the Low voltage indicator LED light, the battery is completely, Proposed to replace the battery

	RF Performance Description 无线性能描述 O
序号	性能参数描述
No.	Performance or Parameters Description
1	采用2.4G无线RF传输技术,发射功率0DB,接收灵敏度–98DB The RF is Standard with 2.4G ISM ,the Tx power is 0DB and the RX sensitivity is –98DB
2	具有64个跳频频道,每个频道间隔1MHZ The RF has 64 channels,the channel gap is 1Mhz
3	空旷直线传输距离大于15米 The transmission distance is further than 15 meters with no barrier
4	智能无线技术,实现自动跳频,自动节约功耗,自动ID码学习 The protocol Designed with high performance, Low power consumption, Automatic learning ID Number
5	采用跳频传输,抗干扰能力强,能自动避开无线路由器,2.4G无线耳机, 蓝牙设备的干扰。 To jump frequency Adaptively when noised ,which can work with 2.4G wireless Mic, Wlan and Bluetooth etc. devices.
6	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 64 sets Wireless Handle work fine at the same time in one room ,with no –interference each other



备注: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)
Note: In order to signal stability of the receiver to be installed outside the chassis

Use the steps Description 操作使用步骤说明 ○

■第1步: (Step 1)

安装驱动:将光盘放入光驱,安装无线手柄的驱动,按照电脑提示,直到安 装成功,并结束安装。

Set up the Driver Software , and flished Set up

Please send CD into the CD–ROM, Please follow the computer prompts, Set up the Driver Software Until flished Set up





- **备注:** 当使用英文版本的维宏系统,请安装英文版本的驱动;使用中文版本的系统,请安装中文版本的驱动;否则工作不正常
- Note: When using the English version of the system, the installation of the English version of the driver; using the Chinese version of the system, install the driver of the Chinese version of the work; otherwise abnormal

鼠标双击图标,开始安装驱动

Double click the icon to begin installing the driver



按照安装提示,直到驱动安装完成

Please follow the computer prompts, Set up the Driver Software Until flished Set up

■第2步: (Step 2)

打开软件:打开刚刚安装的驱动软件,然后再打开数控系统软件NcStudio OPEN The Driver Software, then Open The NcStudio Software



从开始菜单里边打开刚刚安装的驱动 From the Start menu to open just installed the driver inside



■第3步: (Step 3)

将无线USB接收器,插入电脑的USB接口。如果是第1次使用,电脑会提示找到新硬件设备……

等待USB驱动自动加载成功。插入USB接收器后,图标显示如下:

Please Insert Wireless USB Receiver into USB Jack

If this is the 1st use, the computer will be prompted to find a new hard-ware device; Automatically install the USB driver to wait for success $_{\circ}$ USB receiver is inserted, the icon is displayed as follows:



■ 第4步: (Step 4)

启动维宏系统软件,图标变成红色 Start Ncstudio system software, the icon turns red



■ 第5步: (Step 5)

将无线手柄安装上2节AA电池,注意电池的正负方向,不能装错。然后,按下红色电源开关,LCD将显示正常,手柄开始正常工作 Installing 2 AA Batteries into Wireless Handle; Press red Power switch; LCD will display properly, the handle started to work

Features Description 使用功能描述 ●

■按键功能描述(Button Features Description)

对应图标 Correspon –ding icon	名称 Name	按键功能描述 Key function description
0	停止按钮 Stop button	按下该键,停止机床。如果机床不能停止, 长按下3秒,复位运动控制器,机床停止。 Press the button to stop machine; If the machine does not stop, long press for 3 seconds, reset the motion controller, the machine stops.
	开始/暂停按钮 Start / Pause button	机床处于运行状态,按下该键,机床暂停加工 机床处于暂停状态,按下该键,机床继续运行 Machine is running, press the button, the machine to suspend processing Machine is paused, press this button, the machine continues to run
	断点继续按钮 Breakpoint Continue button	用于机床断电或断刀,重上电后,按下该 键,机床从断点处继续工作 Power or cutting knife for machine tools, heavy power, press the button, the machine continues to work from the breakpoint

对应图标 Correspon -ding icon	名称 Name	按键功能描述 Key function description
	浮动对刀开始 /停止按钮/复 位按钮 Floating on the knife start or stop or reset Button	当按下该键,机床执行对刀操作:同时, YES和NO提示灯闪烁,需要用户再次确认是 否需要进行对刀。如果按下YES键,则开始 对刀,LCD的对刀图标闪烁。表示正在进行 对刀操作。按下NO,则退出对刀。 当机床处于加工运行状态下,按下该按钮, 机床复位,停止加工。 When you press the button, the machine Operating the knife YES and NO LED flashing lights, requires the user to reconfirm the need for the knife If you press YES key, the start of the knife, LCD's on the knife flashing; said the ongoing Operating of the knife. Press NO, then exit to the knife When the machine is processing running, processing
++	回工件原点按钮 Back to the origin Button	按下该键,机床执行回工件原点操作 Press this key piece back to the origin of the implementation machine
×/2	X分中按钮 X Coordinates 1 / 2 Button	将X工件坐标分中 X Coordinates 1/2
×/2	Y分中按钮 Y Coordinates 1 / 2 Button	将Y工件坐标分中 Y Coordinates 1/2
	Z安全高度设定 Z Coordinates 1/2 Button	将当前Z轴的工件坐标做为Z轴的退刀点 Z Coordinates 1 / 2
X=0	X=0按钮 X oordinates=0 Button	将当前坐标设置为X轴工件坐标 X coordinate is set to the current Workpiece coordinates axis

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Y=0	Y=0按钮 Y oordinates=0 Button	将当前坐标设置为Y轴工件坐标 Y coordinate is set to the current Workpiece coordinates axis
Z=0	Z=0按钮 Z oordinates=0 Button	将当前坐标设置为Z轴工件坐标 Z coordinate is set to the current Workpiece coordinates axis
	回机械原点按钮 Back mechani –cal origin button	按下该键,执行回机械原点操作。 当按下该键后,YES和NO灯闪烁,同时 LCD显示屏上回机械原点图表闪烁;表示当 前状态为机床回机械原点状态 如果用户按下YES,则全部轴回机械原点; 如果用户按下X,则X轴回机械原点,如果用 户按下Y,则X轴回机械原点,如果用户按下 Z,则Z轴回机械原点; 如果用户按下NO,则退出回机械原点。 Press this key, the mechanical return origin Operating。 When you press the key,YES and NO light flashes and LCD display flashes back to the mechanical origin of the chart; indicates the current state of the state machine back to the mechanical origin If the user pressed YES, then all axis machine origin return; if the user presses the X, the X-axis back to the mechanical origin, if the user press the Y, the Y-axis back to the mechanical origin, if the user press the Z, the Z-axis back to the machine Origin; If the user presses NO, then exit back to the mechanical origin
	步距调整按钮 Step adjustm -ent button	按下该键,调整机床移动的步距; 0X:表示连续移动 1X:步距0.01mm,5X:步距0.05mm 10X:步距0.1mm,50X:步距0.5mm 100X:步距1mm,500X:步距5mm 1000X:步距10mm

		步距调整按钮 Step adjustm –ent button	Press this key to adjust the machine to move step 0X: Continuously moving 1X: move step 0.01mm, 5X: move step 0.05mm 10X: move step 0.1mm 50X: move step 0.5mm 100X: move step 1mm 500X: move step 5mm 1000X: move step 10mm
-	U	微调按钮 Fine adjustm –ent button	对机床进行微调操作,配合手轮,可以微调 X,Y,Z轴的运动。 当处于微调状态下,LCD显示屏上微调图标闪 烁,同时YES和NO灯闪烁,要退出微调,需 要按下YES或NO键。 Fine-tune the Operating of the machine, with Hand wheel, you can fine-tune the X,Y,Z axis movement When in fine-tuning mode, LCD display fine- tune the icon flashes and YES and NO lights flashing, to withdraw from fine-tuning, need to press YES or NO key
	ф®	主轴开启 /停止按钮 the spindle start or stop button	对主轴开启和停止起控制作用 Start and stop the spindle from the control action

■波段开关功能说明(Band switch Functional Description)

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

Band switch control opponents play a round of functional role of the various functions of Hand wheel, gear change through the band switch, and switch accordingly



档位图标 display icons	图标名称 Icon name	功能描述 Functional Description
OFF	OFF档位 OFF stalls	关闭手轮功能,平时不用手轮,需要将波段 开关处于OFF状态,以防止对手轮的误触发 和节约功耗,延长电池使用寿命 Off Hand wheel function, usually do not hand wheel, needs to be the band switch is in OFF state to prevent false triggering round opponents and saving power consumption and extend battery life
+	X轴 X—axis	当进行微调或手动调节的时候,摇动手轮对 X轴进行移动控制 当摇动手轮速度为4圈/秒:则进入高速移动 机床 When fine-tuning or manual adjustment of the time, shake the hand wheel on the X axis motion control
Y	Y轴 Y–axis	当进行微调或手动调节的时候,摇动手轮对 Y轴进行移动控制 当摇动手轮速度为4圈/秒:则进入高速移动 机床 When fine-tuning or manual adjustment of the time, shake the hand wheel on the Y axis motion control

档位图标 display icons	图标名称 Icon name	功能描述 Functional Description
Ζ	Z轴 Z-axis	当进行微调或手动调节的时候, 摇动手轮对 Z轴进行移动控制 当摇动手轮速度为4圈/秒:则进入高速移动 机床 When fine-tuning or manual adjustment of the time, shake the hand wheel on the Z axis motion control
\bigcirc	手轮引导 Hand wheel Lead	当机床处于运行状态下(对应的LCD屏上的 运行图标闪烁): 摇动手轮,可以控制加工 快慢和暂停运行控制。在机床处于停止状态 下,和暂停状态下,手轮引导不起作用 When the machine is in running state (corresponding to run on the LCD screen flashing); shake the hand wheel to control the processing speed and the suspension of operational control. The machine is stopped state, and pause state, the Hand wheel Lead does not work
°m	进给速度控制 Feed speed control	当进给速度控制模式下,LCD屏幕显示进给 的预设值和实际值,摇动手轮可以调节进给 的快慢控制 When the feed speed control,LCD screen displays the default value of the feed and the actual values, shaking the hand wheel can adjust the feed speed control
₩5%	主轴转速控制 the spindle speed control	当主轴转速控制模式,LCD屏幕显示主轴转 速的预设值和实际值,摇动手轮可以控制主 轴转速的快慢设置。 When the spindle speed control mode, LCD screen displays the default value of spindle speed and the actual values, shaking the hand wheel to control the speed of the spindle speed setting.

LCD Display Description LCD显示说明 O

当波段开关在X, Y, Z, A档时,显示坐标信息 When the band switch in the X, Y, Z, A gear display coordinate information



当波段开关定位在 多和 WK 位置的时候,显示进给和主轴信息 When the band switch position in the spindle Information





cutting system software open



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