CWGP无线电子手轮

General Wireless Remote Control MGP:CWGP series

说 明 书

MANUAL

使用本产品之前，请阅读本手册并妥善保存手册作日后参考。

The Manual For Funlly Functional Wireless Handle For Engraving Machine




典型应用：数控机床、数控雕铣机、加工中心

applications: CNC machine tools,CNC engraving and milling machine, machining center

该产品是数控机床上配套使用的手摇脉冲发生器(Manual Pulse Generator)，已广泛应用于数控机床、数控车床、加工中心、数控雕铣机等领域。该产品采用无线传输技术，省去了传统的弹簧线连接，减少因电缆引起的设备故障，免去电缆拖动，粘上油等污染，操作更方便。该产品套装包括接收器和无线电子手轮。接收器通过16芯电缆线与设备连接，电子手轮（手摇脉冲发生器）通过无线传输技术与接收器进行连接通讯。操作者手持手轮，可摆脱弹簧线的连接束缚，自由走动。针对大型的龙门铣、数控车床、行走机床、切割等应用，更是带来极大的方便性，提高工作效率。

the product is CNC machine tools supporting the use of manual pulse generator, has been widely used in CNC machine tools, CNC lathes, machining centers, CNC engraving and milling machine, such as fields. The product uses wireless transmission technology,eliminating the need for the traditional spring line connection, reduce the cable caused by equipment failure,replacing the cable drag, sticky, mail and other pollution, more convenient operation. The package includes a receiver and a wireless electronic handwheel, through the receiver is connected to the 16 core cable and equipment, electronic handwheel through wireless transmission technology and the receiver of communication connection. Operator hand wheel, can get rid of the shackles of the spring line, freedom to move around. For large-scale Longmen milling. CNC lathe, machine tools, cutting and other applications, but also bring great convenience, improve work efficiency

支持系统 Support system

适用于德国西门子（SIEMENS）、日本三菱（MITSUBISHI）、法那科（FANUC）、西班牙发格（FAGOR）、法国NUM、台湾元宝、新代等数控.
Apply to SIEMENS 、MITSUBISHI、FANUC、NUM、SYNTEC CNC.....Numerical Control System.

产品特点 Product features

- 无线ISM频段，433MHZ.
  Wireless ISM frequency band、433MHZ
- 10DBM发射功率，-98DBM接收灵敏度,无障碍距离50米
  10DBM Transmit power, RX sensitivity -98DBM, 50meters without barrier
- 抗干扰设计，稳定可靠，同房间使用32套无线手轮，互不影响
  Anti-interference design, stable and reliable, up to 32 sets used in 1 room without affecting each other.
- 低功耗设计，2节AA电池，正常使用30天
  Low-power consumption design,2AA batteries lasting 30 days in normal operation
- 具有轴选功能，倍率选择功能
  Axis and speed selecting knob function.
- 采用合金编码器，性能稳定可靠，手感好，齿位清晰
  Alloy encoder is in good performance, stable and reliable, feel good and precision calibration
- 自带LCD显示屏,显示当前轴坐标及当前倍率值。
  The lcd display data with background light.Display the current work state of the cnc system.
- 按键采用防水开关,防止油,灰尘进入。
  Press key to waterproof,can prevent oil,dust into.

工作原理 Working principle

采用无线传输技术，操作方便，省去了传统的弹簧线连接，减少了电缆故障率，免去电缆拖动，粘上油等污染。

Using wireless transmission technology, convenient operation,eliminating the traditional spring wire connection, reduce the failure rate of cable and remove cable drag viscous oil pollution

产品功能描述 The product function description

使用说明 Instructions

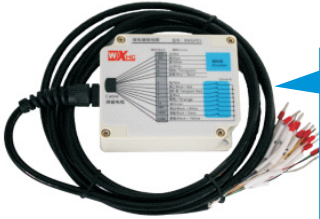
1.先将接收器电缆连接到机床系统上。
The first receiver cable is connected to the machine tool systhm

2.手轮安装2节AA电池，打开电源开关，就可以正常使用
Hand wheel to install the 2AA battery, open the power switch,you can use the normal

CWGP接收器功能与接线原理

CWGP receiver function and wiring diagram

接收器功能与接线原理 Receiver schematic



为了保证距离远，需要将接收器安装在机箱顶部，外露，不要装在机箱内

To guarantee proper operation from far distance, receiver needs to be installed on top of the chassis instead of inside the chassis

线号/Mark	颜色/Color	功能/Function
+5V	红/Red	电源正极/Power+
0V	黑/Black	电源负极/Power-
A	黄/Yellow	脉冲A相/Pulse A
B	白/White	脉冲B相/Pulse B
A-	透明白/Transparent white	脉冲A-相/Pulse A-
B-	蓝黑/Blue+Black	脉冲B-相/Pulse B-
X	棕/Palm	轴选X轴/Axis X
Y	黑红/Black+Red	轴选Y轴/Axis Y
Z	透明+黑/Transparent+Black	轴选Z轴/Axis Z
4	蓝/Blue	轴选4轴/Axis 4
5	橙色/Orange	轴选5轴/Axis 5
1X	绿/Green	倍率1X/Rate 1X
10X	黑白/Black+White	倍率10X/Rate 10X
100X	黑绿/Black+Green	倍率100X/Rate 100X
COM	黑黄/Black+Yellow	公共信号/Common signal

无线电子手轮CWGP型号规则

Wireless Remote Control CWGP model rule

型号说明 CWGP01-5-A A

①②③④

序号	说明
①	脉冲输出参数: 01:100PPR,A,B相位差90度的5V脉冲信号输出 Pulse output parameters: 01:100PPR,5V pulse signal output with A,B phase difference of 90 degrees
	02:25PPR,A,B相位差为90度的12V脉冲信号输出 02:25PPR,12V pulse signal output with A,B phase difference of 90 degrees
	03:100PPR,A,B,A-,B-相位差为90度5V差分脉冲信号输出 03:100PPR,5V differential pulse signal output whith A,B, A-,B- phase difference of 90 degrees
②	手轮支持轴数：6表示6轴;4表示4轴;3表示3轴. Number of axis supperted: 6 denotes 6 axis;4 denotes 4 axis;3 denotes 3 axis;
③	手轮轴选输出方式：A表示点对点输出，B表示编码输出. Axis option output signal: Adenotes non-coding,B denotes encoding output
④	手轮倍率输出方式：A表示点对点输出，B表示编码输出. Rate option output signal: Adenotes non-coding,B denotes encoding output

脉冲输出选型指南

Pulse Output Selection Guide

型号 Model	参数描述 paramenter description	适合系统 suitable systems
Gp01	电源DC5V,输出脉冲100PPR, 相位输出为A,B两路脉冲序列 A和B相差90; 开路集电极电路,内装200欧5V 上拉电阻 DC5V power supply,100PPR pulse output,phase outputA,B phase difference 90degrees between A and B; open collector circuit with 200 ohm 5V pull-upresistor	日本法那科FANUC系统 台湾中达电通TNC 台湾忆图（HUST）系列 国内如航天数控,华中数控,广州 诺信凯恩帝KND等系列 FAUNC system made in Japan TNC system made in Taiwan HUST series made in Taiwan Aerospace CNC,HuazhongCNC, Guangzhou Nordson,KND etc
Gp02	电源DC12V,输出脉冲25PPR, 相位输出为A,B,两路脉冲序列 A和B相差90 开路集电极电路,内装2K欧12V 的上拉电阻 DC12V power supply,25PPR pulse output,phase output A,B phase difference 90degrees between A and B open collector circuit with 2K ohm 12V pull-up resistor	日本三菱MELDAS电子手轮 （MELDAS M64;M65;E60 等系统为电源DC12V,输出为 DC5V） MELDAS handwheel made in Japan(MELDAS M64;M65;E60) SELCA systems made in Italy

脉冲输出选型指南

Pulse Output Selection Guide

型号 Model	参数描述 paramenter description	适合系统 suitable systems
Gp03	电源DC5V,输出脉冲100PPR,相位输出为A,A-,B,B-,采用5V差分脉冲信号输出 DC5V power supply,100PPR pulse output,phase outputA, A-,B,B-, 5V differential pulse signal output	适合PC_BASE系统,典型系统如：台湾宝元POUYUEN M600 M500 M520i T300 ELC-1000系列,台湾新代SYNTEC系统,德国PA系统,典型如:海德盟Higerman,海那克Higerman,广州数控GSK,开通数控 等数控系统；国外系统：西门子,NUM,西班牙法格FAGOR(NEW,8055I)等 PC_BASE systems,eg:Taiwan POUYUEN M600 m500 m520i T300 ELC-1000 series; Taiwan SYNTEC systems Germany PA systems such as Higerman, HANUC,GSK,Kaitong CNC; other systems such as Siemens, NUM,FAGOR (new,8055I)

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