

Waterjet Cutting Wireless Handle

Usage Instructions

Version: 1st version

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1 Introduction to Wireless Handle

The waterjet cutting software supports remote control with a wireless handle, which must be the special waterjet cutting wireless handle customized by Chengdu Xinhongchang Wireless Technology Co., Ltd. for our company. The handle can move freely within 40m in the open area, so the users don't have to conduct operation at the computers. It facilitates the processing and positioning, improves operation efficiency and maximizes materials utilization.



Fig. 1-1 Picture of wireless handle



2 Instructions to Wireless Handle

2.1 Functions of Keys

| , | | | | | | | |
|-------------|---|------------|---|--|--|--|--|
| | Start | = | Pause | | | | |
| | Stop | | Breakpoint resume | | | | |
| | Near point processing | XY=0 | X/Y axis clear | | | | |
| Z=0 | Z-axis clear | (0, 0)♦ | Returning to workpiece zero | | | | |
| w. | Feed mode selection (jog and step 0.1mm, corresponding to JOG and Step signal lamps at handle top respectively) | REF.Point | Returning to the machine origin (all axes) | | | | |
| ** + | Feed override+ | W - | Feed override - | | | | |
| X+ | Corresponding to X-axis positive direction | X- | Corresponding to X-axis negative direction | | | | |
| Y+ | Corresponding to Y-axis positive direction | Y- | Corresponding to Y-axis negative direction | | | | |
| Z+ | Corresponding to Z-axis positive direction; jiggling in running mode | Z- | Corresponding to Z-axis negative direction; jiggling in running mode | | | | |
| \sim | High speed; used together with other directional keys | Estop // | Emergency stop, corresponding to Alarm signal lamp at handle top; jog key | | | | |
| Water | Water pump, corresponding to Water signal lamp at handle top | Water | Water valve | | | | |
| Oil | Oil pump, corresponding to Oil signal lamp | Abrasive | Sand valve | | | | |
| H.P | High-pressure valve, corresponding to HP signal lamp at handle top | L.P 4 | Low-pressure valve | | | | |
| A.Flow+ | Sand valve flow rate+ | A.Flow- | Sand valve flow rate- | | | | |

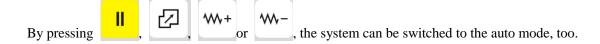
2.2 Operation Instructions

Switching to Auto Mode

Users can switch to auto mode via either method as follows:

By pressing or , the system is switched to auto mode and starts processing. Switching to other modes is not allowed at this time.





Switching to Manual Mode

By pressing or any directional key, the system can be switched to the manual mode.

Switching to the Reference Point Mode

By pressing , the system can be switched to the reference point mode. All axes return to the machine origin.

High-speed Combination Key

Manual high-speed combination key, i. e. pressing and any directional key at the same time in manual mode

2.3 Related Parameter

| Parameter | | Meanings | | Setting | |
|-----------|--|--|-----------------------------------|---------|--|
| N52022 | Wireless Handle Connection Prompt | The parameter is set to "No" by default. There is no connection info displayed no matter whether the user is equipped with a wireless handle; When the parameter is set to "Yes", after the software is started, in case of connection failure of wireless handle, the following two messages might be prompted: If the wireless handle is not plugged in, there is prompt "fail to start wireless handle". The info will be recorded in the log; If the wireless handle is plugged in, while PHBX.dll base used for connection in the software is lost, there is prompt "\PHBX.dll has been changed or corrupted" when the software is started. | Yes: prompt; No: prompt. | no | |

3 Advantages and Features

The operating panel is handy and easily-understood. The operating keys are customized according to the software. The keys can control the ports, and directly control the machine to execute the functions such as returning to the workpiece zero and breakpoint resume.



- The wireless handle adopts the low-consumption design and doesn't need a power supply switch. It will enter the power-saving mode in case of no operation for a short time.
- The external signal receiver improves the stability of signals transfer and features hot plug.
- With rubber protective cases equipped, the wireless handle durability is improved significantly.

4 Precautions

- Please re-start the software with the wireless handle connected.
- The receiver and the handle are one-to-one matched. Mixed usage is not acceptable.
- The handle uses No. 7 battery. When the yellow warning light on the handle is on, the battery is running out. Please replace the battery as soon as possible, to ensure normal operation.
- > Don't remove the silicon cases; otherwise the waterproofing function will be affected.
- > Don't fix the signal receiver in the electric cabinet, to avoid bad performance of signal reception.
- The wireless handle is applicable to Version 10.510 (10.510.4 for two axes, 10.510.2 for three axes, and 10.510.7 for five axes) or above of Weihong waterjet cutting control systems.