

# CNC Shape Cutting Controller

## MicroHYD-GE200-XP Hardware Guide

Support Plasma/Flame Gantry Cutting Machine



**HYD.CNC**

<http://www.hydcnc.com>

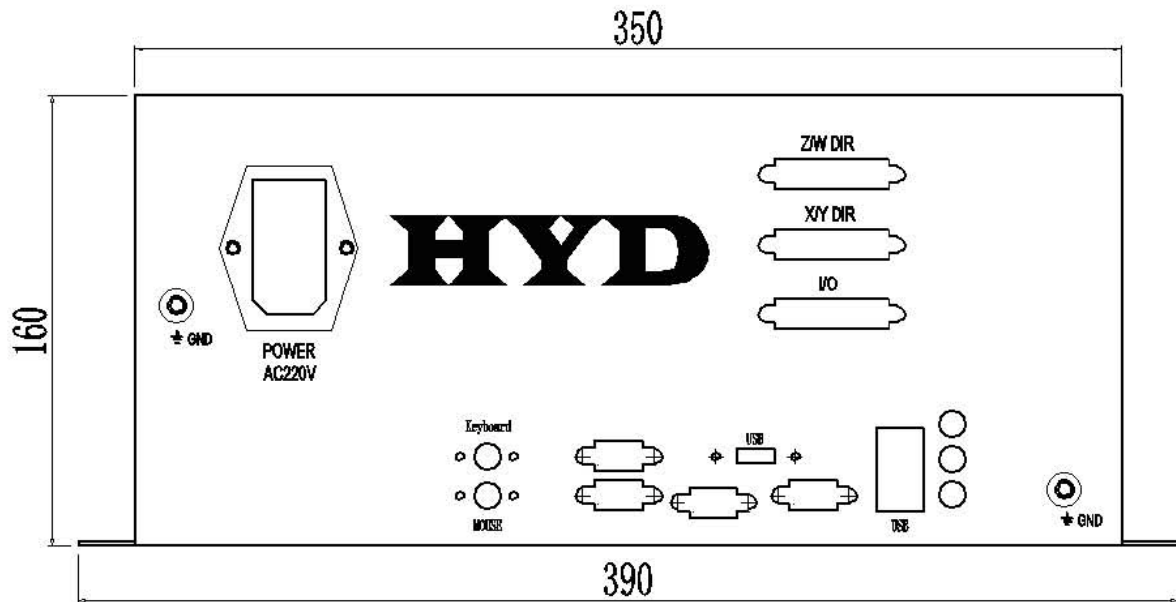
## 1. Overview

1. MicroHYD-GE200-XP is a two-axis system for plasma and flame cutting.
2. Position control, Windows XP operation system.
3. Fan-free embedded industrial mainboard with low-power consumption.
4. Inter Celeron 1G CPU, 160G-IDE hard disk and 512 memory (optional), Power Supply from Taiwan.
5. GE200 motion control card from GOOGOL.
6. Control module under Low-power consumption design. (390\*220\*160mm).
7. Professional cutting software. English/Chinese version, supplied with MicroHYD controller.
8. Support flame and plasma cutting, as well as various torch height controllers.
9. Supporting double-plasma synchronous cutting and having a function of double-plasma cutting selection.
10. Having unique function of DXF document reading and automatically generating cutting codes
11. Support most cutting codes currently used;
12. Steel plate straightening function;
13. And multilevel punching functions.

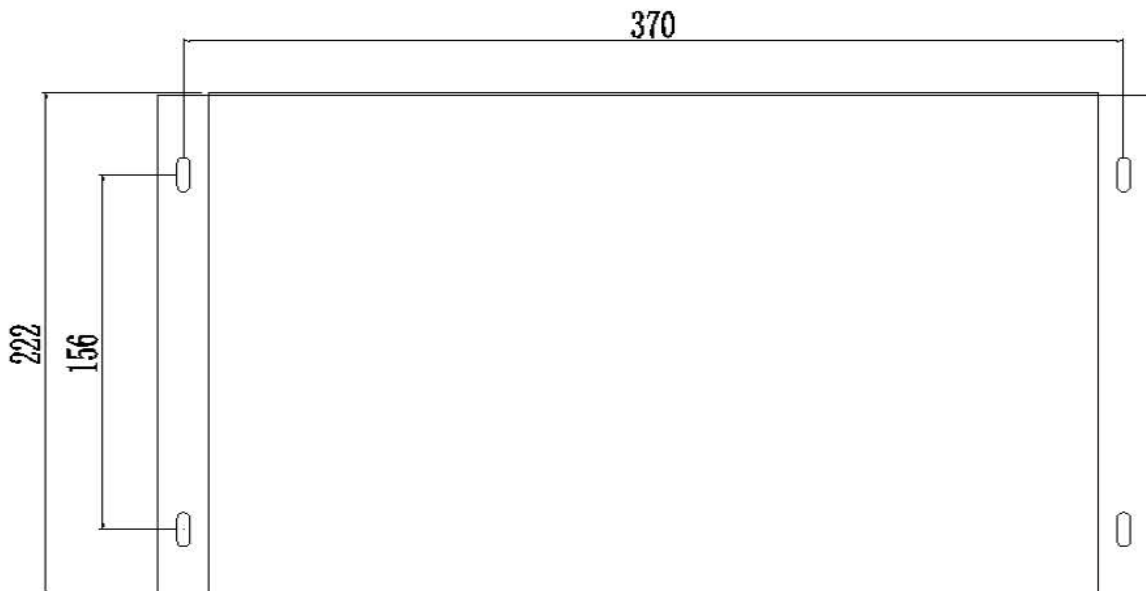
**Monitor, Keyboard, and Mouse are custom supplied,  
MicroHYD can drive Relay directly up to 200mA, but its control  
features and functions will be greatly expanded through use of  
our Shape Cutting System Expanding Control PCB.**

## 2、MicroHYD-GE200-XP

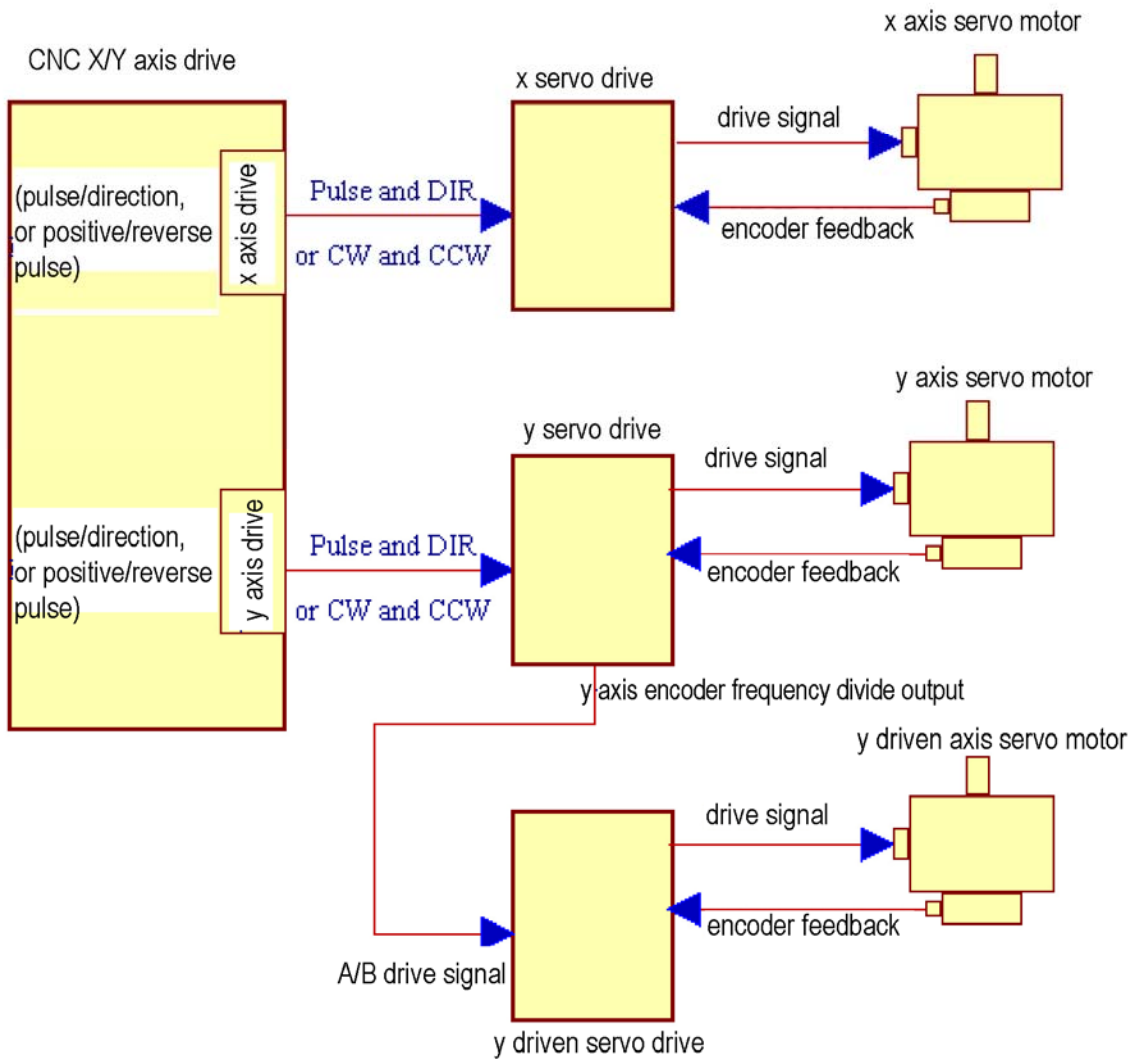
L\*W\*H:390\*222\*160mm



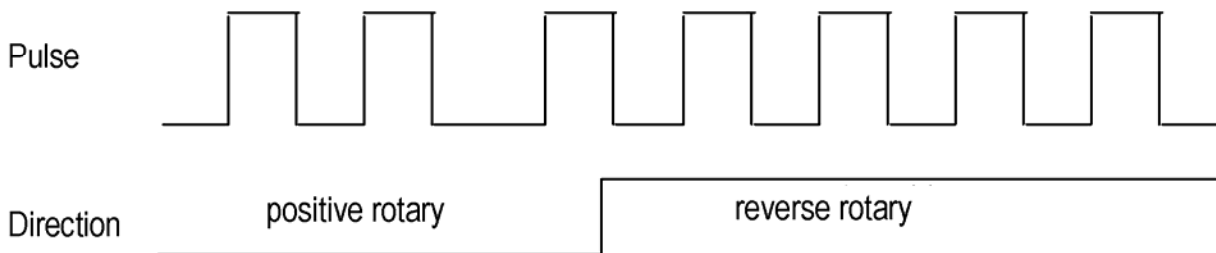
## 3、installation Size



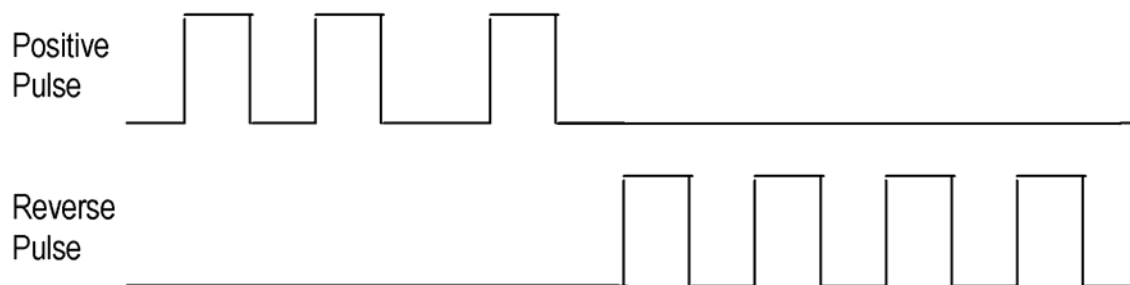
## 4、 Servo Drive Diagram



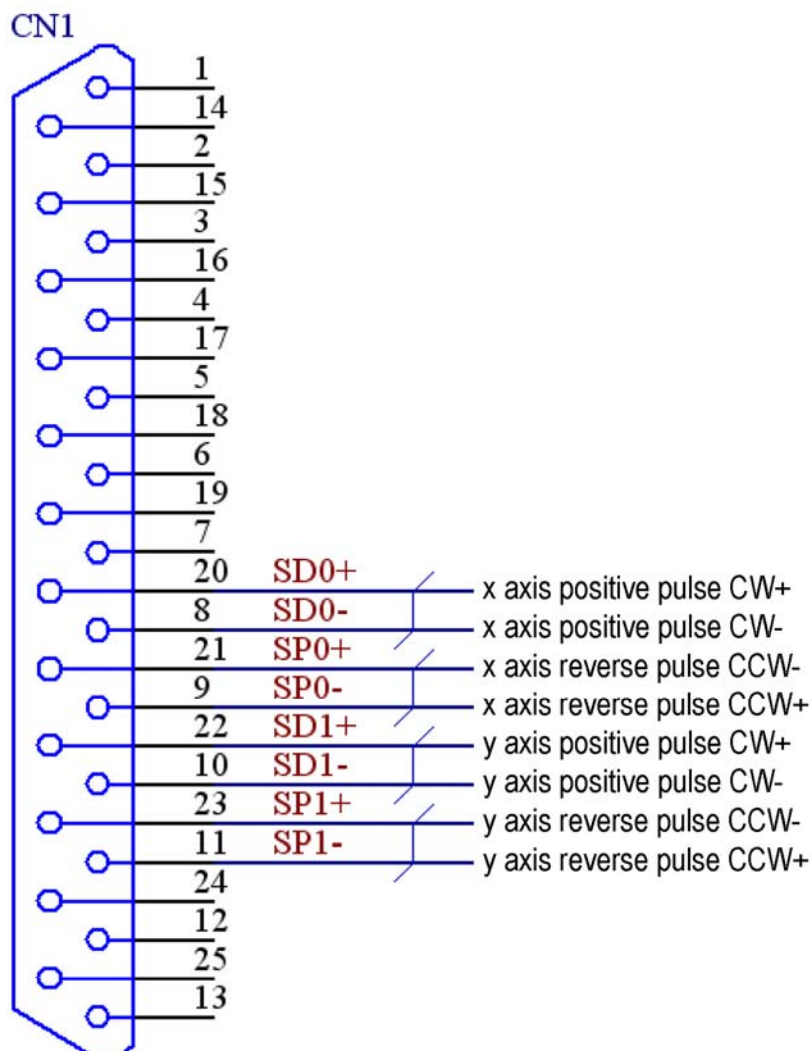
MicroHYD Drive Signal uses Linear Drive Output, via parameter setting, there are two modes, Pulse/Direction, Positive/Reverse Pulse. Pulse and Direction shows as follow,



Positive/Reverse Pulse Drive as follow,



### 5、 X/Y、 Drive Signal Pin Definition

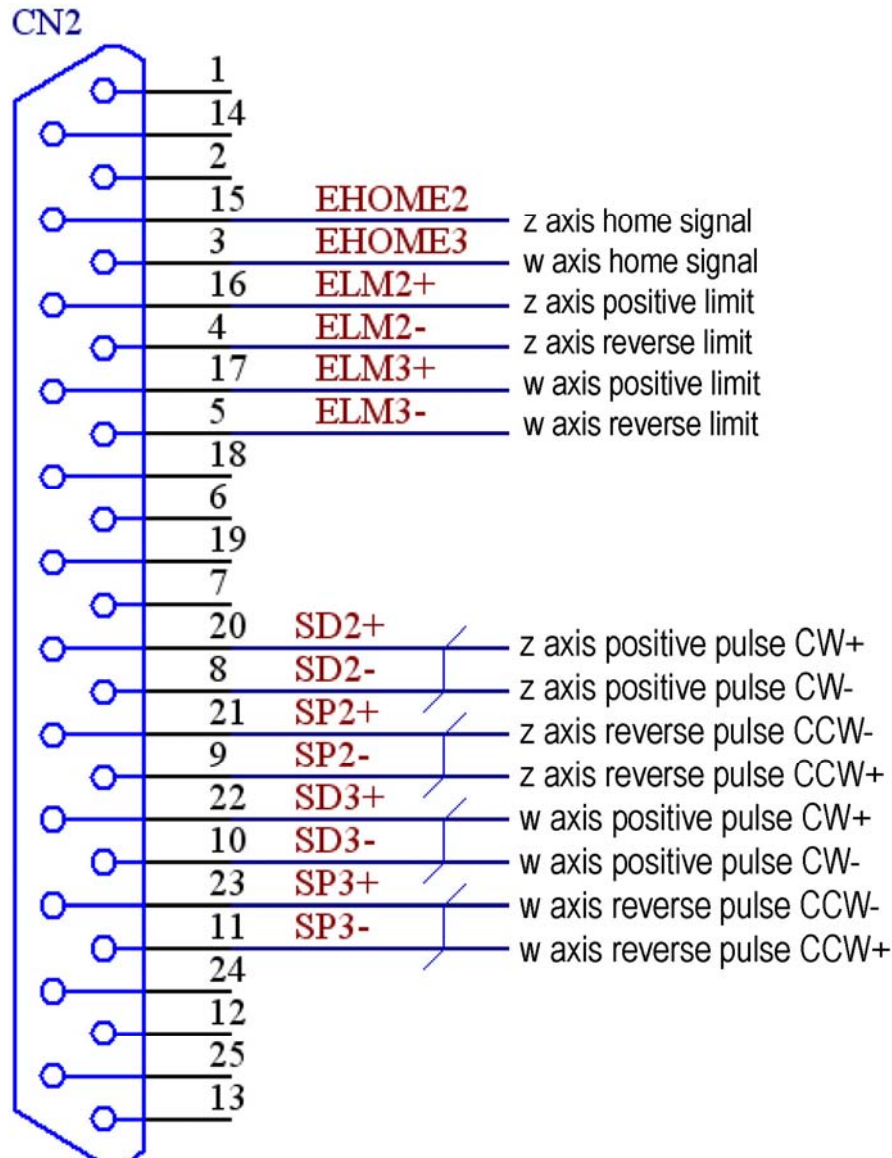


X/Y position drive (D-25pin-female)

Note: On use of GE200 motion control card, only X/Y drive signal effective, X is first axis, Y is second.

## Z / W Drive Signal Pin Definition

If it is GE300 or GE400 motion control card, Z/W signal is effective, and Z is third axis, W is fourth axis

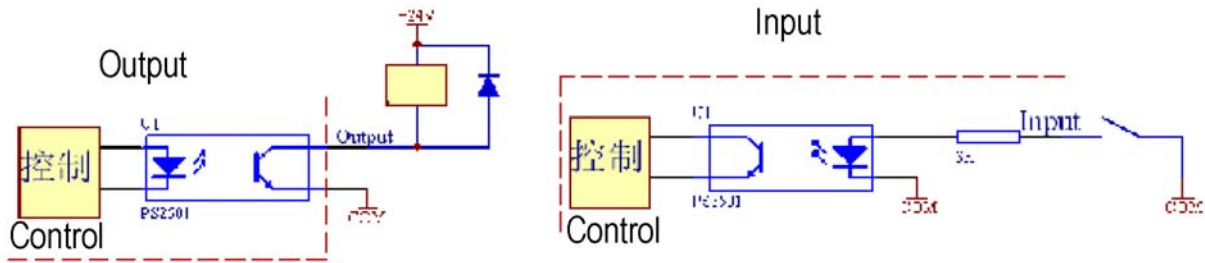


Z/W Position Drive D-25-Pin-Female

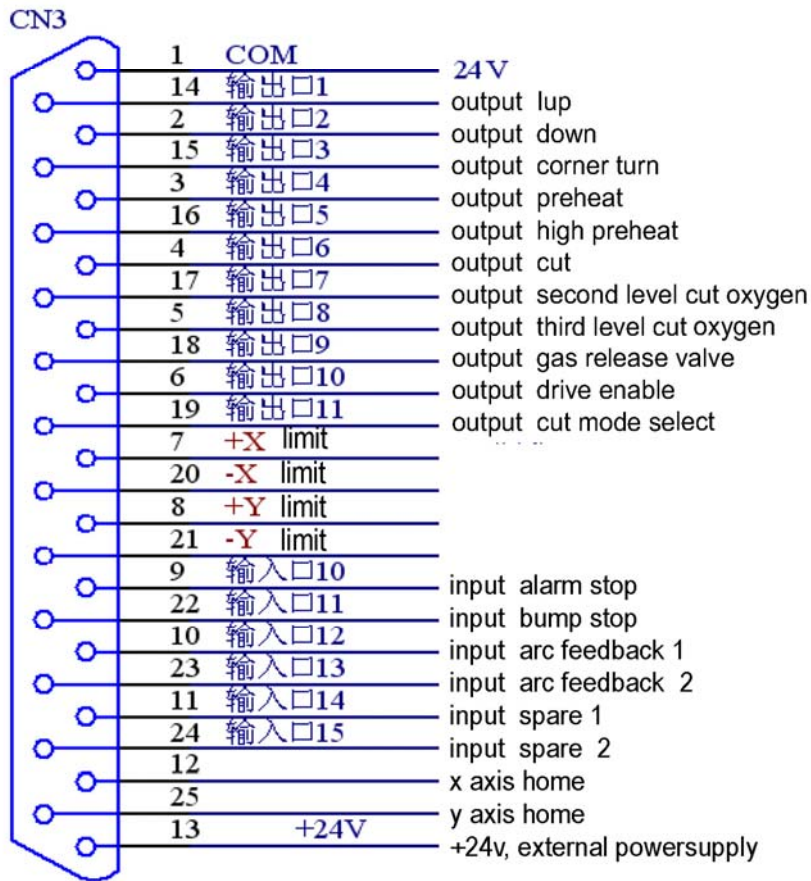
## 6、MicroHYD I/O

MicroHYD Output adopts Optical Isolation, Isolation Voltage is 5000V, Driving Current is 50mA. It can drive Relay below 40mA, or other load below 40mA, or work as PLC. It is Open Collector Output  
The Driving Load can be increased to 200mA or more, subject to customer request.

MicroHYD uses Optical Isolation Input, the Isolation Voltage is 5000V, Driving Current is 50mA. Input current is around 8mA. It could be adjusted according to customer request. Follow is I/O application.



### 7、I/O Pin Definition



I/O Drive D-25-Pin- Male

Note: Pin definition above is permitted by CNC during installation, but MicroHYD I/O is open to custom setting, user can define it according to actual situation.