

ZX400 Control Unit Easy User Manual




1. Before powering on

Connect the IO output line and the plug of the measuring device to the corresponding socket of the control instrument. After confirming the electrical connection between the output line and the grinder is correct, power on again.

2. Zero position adjustment





1) Select a standard component to install on the machine tool;


2) Adjust the position of the upper and lower measuring elements to ensure that the measuring device does not touch the surface of the workpiece after entering the measuring station;


3) On the main page, set the adjustment value to 0 by pressing the  ,  ,
or  buttons;



4) On the main page, click  to enter the adjustment interface.

ZX410 series (taking ZHD-1070BC outer diameter measurement device as an example)

a. Confirm whether the G1 reset value is 0. If it is not 0  , press the 
button once to reset the G1 value to 0  and record the current G1 display
value  ;




b. Adjust the position of the lower gauge so that the displayed value of G1 is about half of
the original value  and lock it tightly;


c. Adjust the position of the upper measuring element again so that the displayed value of
G1 is around 0  (Not exceeding $\pm 30 \mu\text{m}$) and lock it tightly;




d. The operating device enters and exits several times, and finally stops at the measurement
station. Press the button  to set the G1 display value to 0  ,
completing the zero position adjustment.

e. Adjust another measuring device according to the above a-d operation sequence to
complete the zero position adjustment of G2.

ZX420 series (taking ZHD-1140BC inner diameter measurement device as an example)

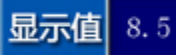
a. Confirm whether the G1 reset value is 0. If it is not 0  , press the 
button once to reset the G1 value to 0  ;

b. Adjust the position of the lower probe so that G1 displays a value near 0 
(Not exceeding $\pm 30 \mu\text{m}$) and locked tightly;

c. Press the button  to enter the G2 zero position adjustment interface, confirm
whether the G2 reset value is 0  , and if it is not 0, press the button 

once to reset the G2 reset value to 0 


d. Adjust the position of the upper probe so that the displayed value of G2 is around 0

 (Not exceeding $\pm 30 \mu\text{m}$) and locked tightly;

e. The operating device repeatedly enters and exits several times, and finally stops at the measurement station to reset G1 and G2 respectively, so that the displayed values of G1 and

G2 are 0 , completing the zero position adjustment.

3. Setting of signal points

After clicking the button , enter the signal point parameter setting interface:

P1 Brief grinding signal point;

P2 Refined grinding signal point;

P3 Buffing grinding signal point;

P4 Knife retraction signal point;

SCUT Signal cutoff value (when the displayed value on the main page is less than the set cutoff value, all four signal points have no output);

The default factory values for each signal point are as follows:

P1	100.0	测量类型	G1
P2	40.0	滤波等级	0
P3	10.0	信号切断	-30.0
P4	0.0	下一页	

Note: The signal point setting value needs to meet the following requirements:
 $P1 > P2 > P3 > P4$.

Measurement type: G1, G2, G1+G2, G1-G2 can be selected (factory parameters have been set, please do not modify);


S filtering level: can be selected from 0, 1, 2, 3, 4, 5 (the filtering parameters are already set at the factory, please do not modify them).


Filter level setting method: Set to 0 during continuous surface machining measurement, When measuring the intermittent surface, it is set in sequence from high to low based on the workpiece speed or vibration frequency


From 1 to 5, increase or decrease according to the actual situation, and find the optimal gear.


4. Adjustment function

After completing the zero position adjustment and signal point parameter settings, click the

button  to enter the active measurement interface.

Click  to manually input the adjustment value.

Click  to perform additional adjustment and operation to increase the grinding allowance.

Click  to perform adjustment operations to reduce grinding allowance.

Note: The default value for adding, subtracting, and adjusting equivalents is 1 μm .