REALE
环瑞测试

Electromagnetic vibration generator system

RDC-50B

Operation

Manual

Foreword

Thank you for purchasing our testing machine.

This manual details the operating procedures, maintenance methods and simple troubleshooting and precautions for use.

Please read this manual carefully and follow the prescribed procedures to ensure that you can operate it smoothly every time. Please keep in mind the precautions to avoid machine failure due to improper human operation. Proper maintenance methods can extend the life of the machine .

All products of our company have passed strict quality control inspection before leaving the factory, you can use it with peace of mind, if you have any difficulties or problems, please contact our company directly .

Contents

1. Overview

Electromagnetic sweeping frequency vibration testing machine consists of excitation table body and console body. This vibration testing machine is made of composite industrial materials, precision processed, the table is beautiful and generous, humanized operation and control, and the special measurement and control module is adopted to make the equipment work more stable and reliable.The electromagnetic vibration test series is widely used in the vibration inspection of quality system certification in the industries of communications, electronics, automobiles, household appliances, etc. This type of equipment is suitable for the detection of early failures, simulation of actual working conditions and structural strength tests. This series of products can also be used for various products in scientific research and vibration resistance test on production lines, so that your product quality has a strong and reliable guarantee.

2. Performance and technical parameters

① Test load: 60kg

② Frequency range: 3—400Hz

③ Sweep frequency range: 3—400Hz

④ No-load displacement amplitude (adjustable range P－P): 0—5mm

⑤ Maximum acceleration: 10G

⑥ Vibration direction: vertical. horizontal

⑦ Power: 2.2KVA

⑧ Working table size L.W.H (mm): 600×500×46

⑨ Vibration table size L.W.H (mm): 1000×600×480

⑩ Control box size L.W.H (mm): 350×250×710

⑪ Working power: AC 220V/50Hz ±2%

⑫ Use environment: 0—＋45℃

3. Safety notice

- **Do not operate in explosive environments**

Do not use the instrument where flammable and explosive products are placed . Using any electrical instrument in this environment may cause safety injuries.

- **Protective ground**

Make sure that the protective ground wire is connected before turning on the power , otherwise it will cause potential electric shock injury.

It is strictly forbidden to use the neutral line of AC power as the protective earth.

- **Power supply**

Before turning on the power, make sure that the power supply voltage matches the specified rated voltage.

fuse

Please use the specified standard fuse (250V , 10A).

Before replacing the fuse, be sure to cut off the power supply.

It is strictly forbidden to short-circuit the fuse socket to use the instrument.

- **Do not open the shell of the instrument by yourself**

There are high voltages inside the instrument . Without special permission, please do not remove the instrument shell and disassemble any parts of the instrument.Otherwise, the company will not be

responsible for any consequences arising therefrom.

4. Notes on handling and installation (no need to be fixed with the ground)

Handling precautions:

When carrying the vibration table body, please apply force from the bottom of the bracket.

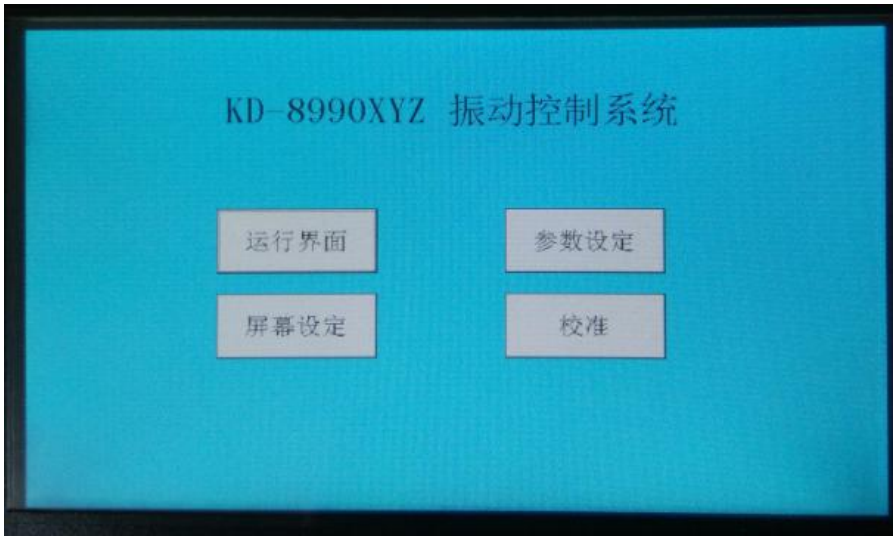
When carrying the console body, please use the handles on both sides of the table body, and move it gently.

Installation Precautions:

Ground installation: When placing the instrument on the ground, pay attention to the level

5. Matters needing attention and maintenance

5.1.1. Directory interface

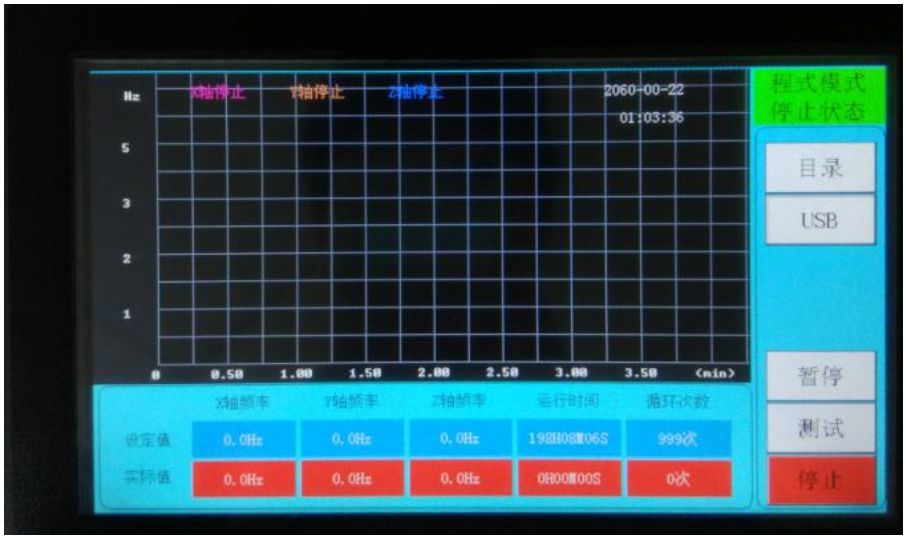


Button response in the directory interface:

- Button "Run interface " : Enter the test interface;
- Button “Parameter Setting ” : Enter the parameter setting interface before testing;

- Button "Screen Setting " : Enter time, Chinese and English switching, buzzer interface;
- Button “Calibration ” : Enter the calibration interface;

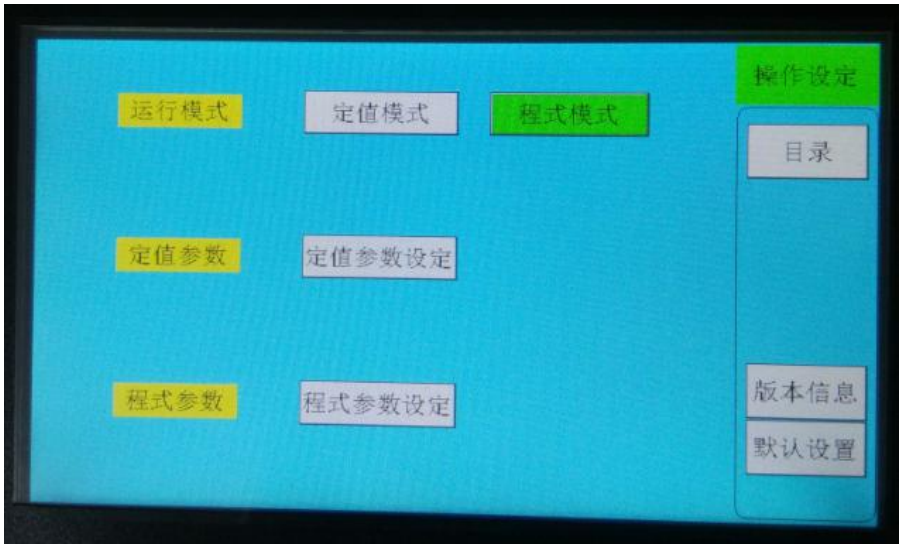
5.1.2. Operation interface



Response when testing interface:

- Button “Directory ” : return to the directory interface;
- Button "USB " : Enter the USB download interface. When downloading data, you must enter the USB interface before you can insert the U disk;
- Button "Test " : Perform test;
- Button "Stop " : Click this button to stop the test during the test;
- Button “Pause ” : Click this button to pause the test during the test;

5.1.3. Parameter setting



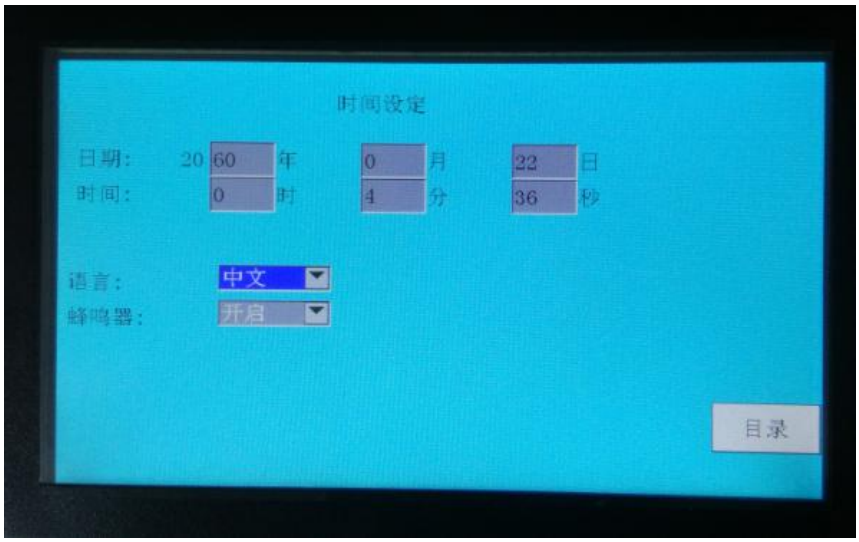
Mode: select test operation mode, fixed value mode, program mode

- Constant value parameter setting: Enter the constant value parameter setting interface;
- Program parameter setting: enter the program parameter setting interface;
- Button “Directory ” : return to the directory interface;
- Button "default setting": The set parameters are restored to the factory default values;
- Button "version information": view version information;
- Button "Test Interface": return to the main test page.

5.1.4. Program parameter setting

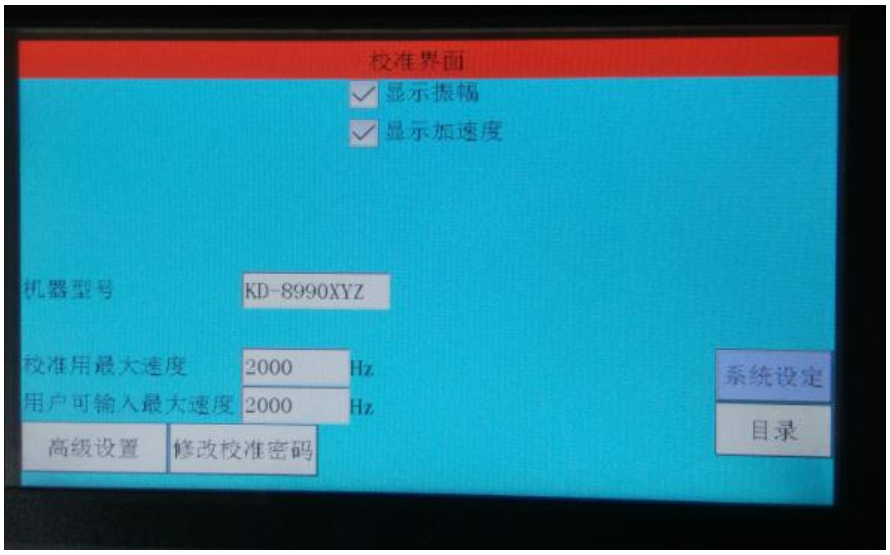
- Formula: select test formula, user can save three groups of test formula;
- Number of cycles: the number of cycles reaches the set value to end the test; the test method has 6 stages, click on the test, the system will carry out the cycle test from NO.1-NO.6;
- NO.1 ON-NO.6 ON: Choose whether to execute the corresponding stage, if not, click "OFF " ;
- NO.1 parameter-NO.6 parameter: set the test parameters at this stage, the setting method is consistent with the setting of fixed value parameters;
- Button “Directory ” : return to the directory interface;

5.1.5. Screen setting



- language: select the displayed language;
- Buzzer : turn off and on the buzzer;
- Button “Directory ” : return to the directory interface;

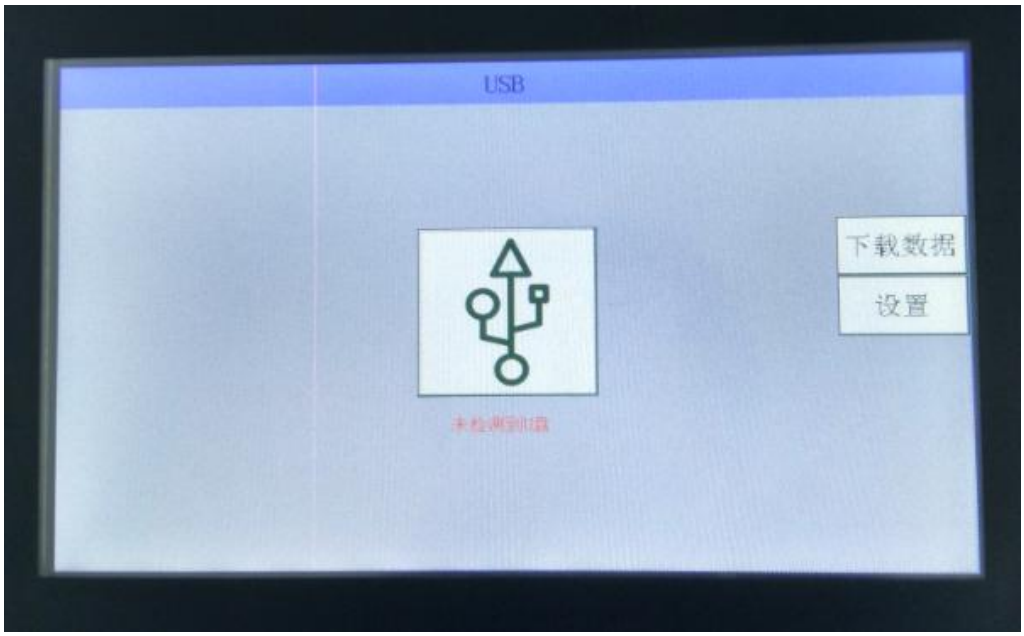
5.1.6. Calibration

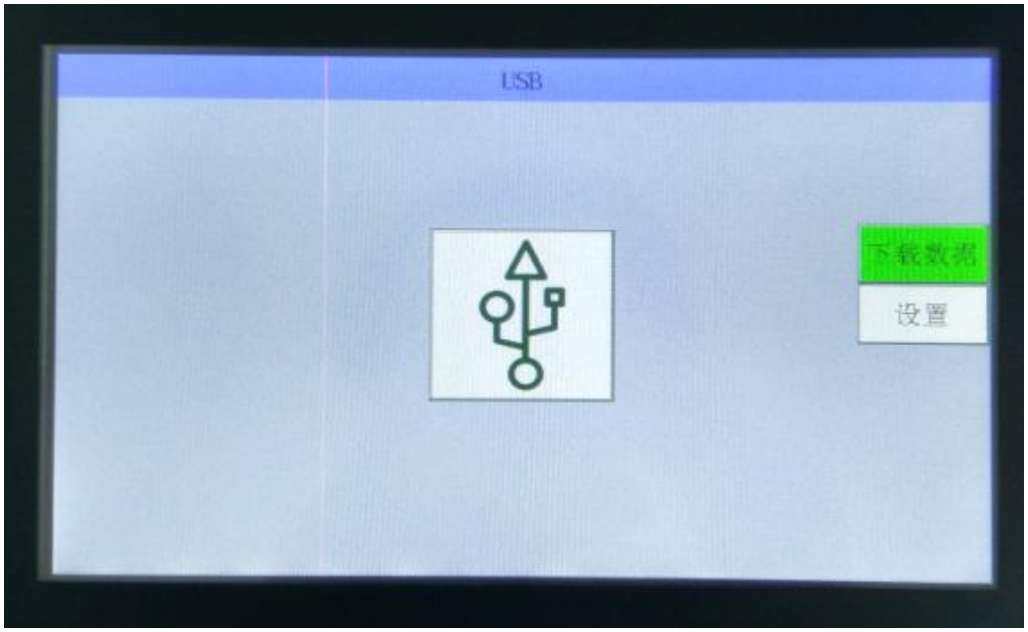


amplitude: whether to display amplitude;

acceleration: Whether to display acceleration;

- Model: set the model of the machine, the model will be displayed in the catalog interface;
- Button "Advanced Settings " : Enter advanced settings;
- Button "Modify Calibration Password " : modify the password to enter the calibration interface;
- Button “Directory ” : return to the directory interface;
- Remarks **:**
- The above is the normal version, the advanced version has the function of downloading data via USB ;
- **USB download interface**
- U disk is not inserted, a prompt will appear that the U disk is not detected, and the data cannot be downloaded at this time;





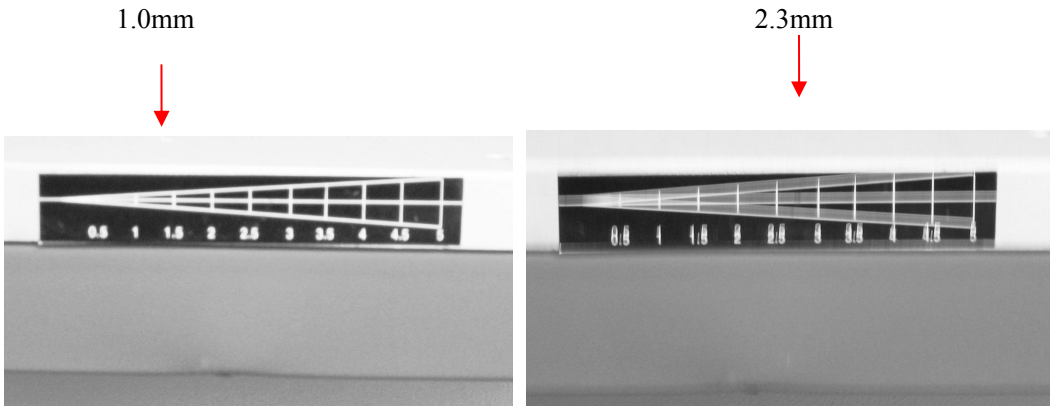
- After inserting the U disk, the "download data" will turn green;
- Button "download data " : download data to U disk;
- Button “Settings ” : return to the setting interface;

6. Vibration amplitude observed DESCRIPTION

In the low amplitude state of the workbench (Figure 1), you can see three white lines on the amplitude label , and then look at the intersection of the upper line and the middle white line or between the white line and the lower line. At this time, the two lines intersect and clamp the middle Black isosceles triangle. The part of the triangle tip is above the number 1 on the scale of (Figure 1) , and the amplitude is 1.0mm .

When the vibrating table at the time (FIG. 2) can see two lines intersect location is changed, at this time the position of the black line portion sandwiched between two tip referred to the vibration amplitude values

move. The current amplitude value (Figure 2) is 2.3mm amplitude.



Reference Photo