## 控制部分操作说明书 Control part operation instruction

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## 1. 主要参数 The main parameters

称量范围 Weighing scale: 1000g~10000g

单机称重最大速度 Maximum speed: 20/M

显示精度 Display precision: 1g

电源要求 The power supply requirements: AC220V 50/60HZ 1000W

## 2. 注意事项 considerations

- 1、电源必须有可靠的接地线。The power supply must have a reliable grounding line
- 2、称重斗部分不得重压。Weighing bucket should not be stressed
- 3、秤体应水平放置。The machine should be placed horizontally
- 4、上电运行之前应先对秤进行清空标定。Before operation, the scales should be emptied and calibrated

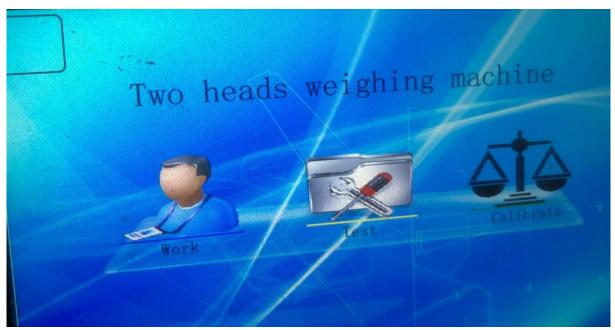
## 3. 日常运行操作 Daily operation

3.1 初始画面 The initial screen

- 1、连接电源打开主断路器 Connect the power switch on
- 2、预热 5 秒后自动进入主菜单 Preheat 5 seconds to automatically enter the main menu

### 3.2 首页画面 Home page picture





在首页画面可以看见相关的功能画面进入端口,均采用拟物图片显示, 一目了然。更加贴近使用者和人性化。

In the front page, you can see the relevant functional picture into the port, using the object image display, at a glance. Closer to the user and humanized.

点击工作页面便可进入工作画面,进行设备生产操作;

Click on the work page to enter the work screen to perform the equipment production operation

点击调试页面便可进入调试页面,进行设备调试操作;

Click the debug page to enter the debug page for the device debugging operation

点击标定页面便可进入标定页面,进行设备标定操作

Click the calibration page to enter the calibration page for calibration operation

点击右上角可输入密码进入系统设置页面,相关功能进入后方可操作。

Click the upper right corner to enter the password to enter the system Settings page, the relevant functions can be operated in the re 详细数据功能请参考 5.参数设置 Reference 5. Parameter Settings

### 3.3 工作页面 Work picture





如上图所示,每个秤斗在运行中能将实时称量结果在相应秤号右侧显示。而左上角显示的则是此时秤所在的状态,如系统正常,正在下料或者

配料完成等等......同时点击实时重量值便可进入相应秤的设定画面进行设定单秤调试。

As shown above, each weighing bucket can display the real-time weighing results on the right side of the corresponding balance number in operation

The top left corner shows the status of the scales at this time, such as the system normal, under the loading or the ingredients completion, etc

At the same time, the real-time weight value can be used to set the setting of the scale.

累计包数: 统计从开机到当前的包数, 可用清零键清除数据归零。

Cumulative packet count: Statistics from the boot up to the current number of packets, can clear zero key to clear the data to zero

包装速度: 包/分钟。(每60秒统计一次)

Packing speed: Packages/minute (Count every 60 seconds)

运行按钮:此运行按钮控制设备运行,点击此按钮变为绿色,同时点击所选秤内"OFF/ON"按钮打开相应秤工作。

Run button: This run button controls the device to run, and click this button to turn green

Click ON the "OFF/ON" button to open the corresponding scale

清零按钮:用于对所有秤同时进行清零操作。

Zero button: At the same time, zero operations are performed o

连续按钮:用于选择是否启动连续工作模式。

Continuous button: Select whether to start continuous work

放料按钮:用于对所有秤同时进行单次放料操作。

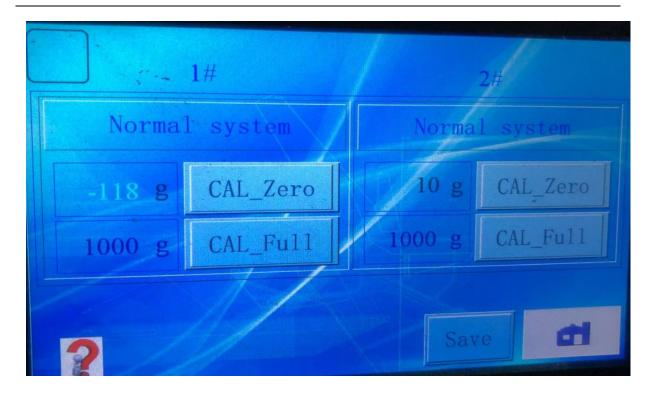
Release button: All weighing buckets are discharged at the same time

#### 4. 初始标定 The initial calibration

初始标定即在首页画面中点击标定页面,是设备工作的前提条件。

The initial calibration is to click on the calibration page in the first page screen, which is the precondition of the equipment work





1、 对相应的秤进行标定操作(**执行动作之前要确保称重斗内已清除残留 的物料**)。

Calibrate the corresponding scales Ensure that the residual material has been removed in the hopper before performing the operation

- 2、单击标零按钮,此时重量显示框内显示 88888,表示正在标定工作。稍等片刻后重量显示框显示 0. 此时可将砝码放入秤斗上。Click the zero button,At this point,the weight display box displays 88888,Indicating the work being calibrated. Wait for a moment,the weight display box shows 0.,at this time you can put weights into scales
- 3、 在标定重量框内输入砝码的重量值,再次点击标定按钮直到重量显示框显示砝码的重量。此时标定流程完成。

Enter the weight value of the weight in the calibration weight box, and click the calibration button again until the weight display box shows the weight of the weight. The calibration process is complete.

#### 注意:整个标定过程必须在无风、无振动的环境中完成

Note: the whole calibration process must be completed in a windless, vibration—free environment

## 5. 参数设置 Parameter Settings





通过密码输入即可进入此系统参数设置页面,在此页面可对相关参数进行设置。

You can enter the system parameter settings page through password input, and the relevant parameters can be set on this page.

参数注释如下: The parameter annotation is as follows

放料延时: 收到请求信号后,延时设定的时间放料。

# Discharging delay: When the request signal is received, the time setting is delayed

信号延时: 放料后经过设定时间发出回送信号。

Signal delay: The discharge signal is sent after setting time

上料延时:由料位光电控制上料电机,当料位光电检测不到信号时经过一个上料延时时间启动上料电机,直到料位光电检测到信号时上料电机停止工作。

Feed delay: The feeding motor is controlled by the material level photoelectric

control, when the material level photoelectric detection signal can not be used, the feeding motor is started after a feeding delay time, and the feeding motor stops working until the material position photoelectric detects the signal.

信号保持: 用于设置回送信号保持的时间。

Signal remain: The time to set the loopback signal hold

速度设置:用于设置设备运行时最高的包装速度。

Speed set: Set the highest packaging speed when the device is running

**密码修改**:输入六位新密码后点击密码修改按钮,以免他人误改参数。注意: 只须输入一次,请记住新密码,出厂密码为888888,如不慎丢失 密码请与设备厂家联系。

Pass work: After entering six new passwords, click the password change button to avoid other people's error. Note: only enter once, please remember the new password, the factory password is 888888. If the password is lost, please contact the equipment manufacturer.

Click Selectable weight display with decimal point. There is a decimal point and no decimal point can be selected

点击 工作 可选择请求信号的检测方式。

Click Rising edge Detection mode of selectable request signal

点击 可选择是主动模式还从动模式。主动模式:包装连续运行以后,以秤为主导,秤按照设定的工作速度工作。从动模式:包装连续运行以后,以包装机为主导,秤按照自己的极限速度及时响应包装机,整体运行速度为包装机的设定运行速度。

Active mode: after the packaging runs continuously, the scale is the leading, and the scale works according to the set work speed. Driven mode: after continuous operation of the packing machine, the machine will be used to control the packaging machine, and the balance will respond to the packaging machine in a timely manner according to the speed of the packaging machine, and the overall running speed will be the setting speed of the packaging machine.

点击 可选择是联机信号还是启停信号。联机信号:信号输入为联机模式,没给一个信号对应一次包装动作,秤下一次料。启停信号:信号输入为秤的运行、停止控制信号,是一个长电平信号,有输入时秤按照设定的运行速度连续工作。没有输入时,秤立即停止继续放料。

Click Is it an on-line signal or a start stop signal?. On line signal: the signal input is online mode, without

a signal corresponding to a packaging action, weighing the next time. Start stop signal: signal input is the scale of the operation, stop control signal, is a long level signal, with input, the scale in accordance with the set speed to work continuously. Without input, the scale stops immediately to continue discharging.

点击 可选择设备运行时是单秤放料或者双秤同时放料。

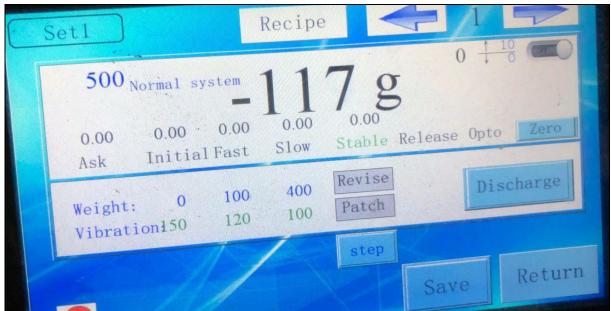
Click When the equipment is running, it is a single scale discharge or double scale simultaneous discharge

## 6. 单秤调试 A single debug

修改好参数后需要测试每个斗的加料情况,可以使用设定画面菜单, 在工作页面上点击实时重量出即可进入设定页面:

After modifying the parameters, you need to test the feeding situation of each bucket, you can use the settings menu, click the real-time weight on the work page, you can enter the settings page





**A. 放料电机测试**:设定好所有参数后可按单次放料测试开门电机运行情况,根据需要调整开门电机速度。

Release motor test: After setting all the parameters, the running condition of the motor can be tested according to the single discharge test, and the motor speed of the door is adjusted according to the requirement B. 加料测试:按照界面提示,输入快加、中加和慢加阶段的重量值、振动量,并根据需要决定是否开启修正和补振。快加阶段的重量一般可为目标重的 50%,中加阶段的重量值一般不超过目标重量的 70%,慢加阶段的重量值要保留适当的提前量设置,防止重量过重和重量不足而导致速度下降。通过振幅设置的参数的修改,使每一个秤斗的测试重量大至相同,确保 2 斗动作协调,提高效率。

Loading test: According to the interface hint, input the weight value and vibration quantity of the fast, middle and slow adding stages, and decide whether to open the correction and the vibration compensation according to the need. Fast loading stage weight can generally be as the target weight of 50%, plus stage weight value is generally not more than 70% of the target weight, and the weight value of slow stage to retain in advance the amount set appropriate, to prevent the heavy weight and weight due to insufficient speed down. Through the modification of the parameters of amplitude setting, the test weight of each scale bucket is large to the same, so as to ensure the coordination of the 2 bucket movements and improve the efficiency.

#### 具体参数释义: Explanation of specific parameters

0.0 系统正常 0.0 1.0 0.0 0.0

# 500 Normal system 1 1 7 σ

系统正常一栏为秤状态显示栏,会显示正在标定,下料中等状态。 系统正常前面的数字是可设置的目标重量值,实时重量值后面的较小的 黑色数值是最终称重稳定值。

The normal column of the system is the balance state display bar, which will show the calibration and the medium state of cutting. The normal number in the front of the system is the target weight that can be set. The smaller black value behind the real weight value is the final weighing stability value.

上升箭头后的数值是允许上限,是允许范围内的最大数值。

The value of the increase arrow is the allowable limit, which is the maximum allowable value within the allowed range.

下降箭头后的数值是允许下限,是允许范围内的最小数值。

The value below the drop arrow is the allowable limit, which is the smallest number allowed



文字一栏显示的是秤工作状态,当秤工作时,其所在的运行阶段文字会显示绿色。

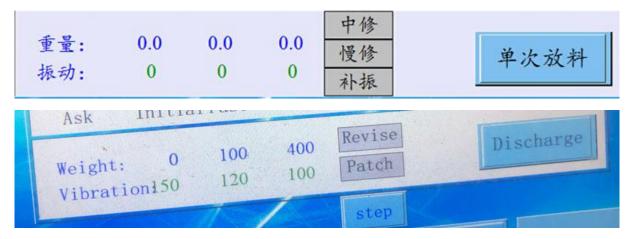
The text column shows the work status of the scale. When the scale works, the running phase text of the job will display the green color.

请求上数值表示秤工作的总时间,包括快加中加慢加和稳定时间的总和。快加中加慢加稳定相应文字上的数值表示秤所在运行阶段的时间。

The total time of the scale work is represented on the request. This includes the sum of the fast addition and the stable time. The time in the running phase of the scale is shown in the corresponding literals

清零按钮可用于执行秤斗清零操作,清零按钮上面蓝色数字输入表示 去皮包数,即经过多少包后秤执行自动去皮。

The zero button can be used to carry out the balance zero operation. The blue number input on the zero button indicates the number of bags, i.e. how many packets are passed to perform automatic skin peeling.



重量表示相应加料阶段数值,达到此数值即可进入此结束此阶段加料 过程而进入下一过程。 The weight indicates the value of the corresponding feeding stage, and the value can reach the end of the feeding process and enter the next process

振动表示相应阶段的加料振动幅度,在相应加料数值前以相应的振动量振动加料。

The vibration represents the amplitude of the feeding vibration in the corresponding stage, and vibrates with corresponding vibration in the corresponding loading value.

保存按钮用于保存仪表数据的作用

The save button is used to save the instrumentation data.

**中修**按钮用于是否启用中加料修正功能,启用后则显示为深绿色,同时后面出现可用于设置的修正包数数值。

The revise button is used for whether to enable the processing of the recharging function. After enabling, the button is displayed as dark green, and the number of modified packets can be used to set up later.

**慢修**按钮用于是否启用慢加料修正功能,启用后则显示为深绿色,同时后面出现可用于设置的修正包数数值。

The patch button is used to enable the slow loading correction function, which is shown to be dark green, and the number of modified packets can be used to set it later

**补振**按钮用于是否启用补振功能,启用后则显示为深绿色,同时后面 出现可用于设置的补振时间数值。

The step button is used to enable the reactivation function, which is shown

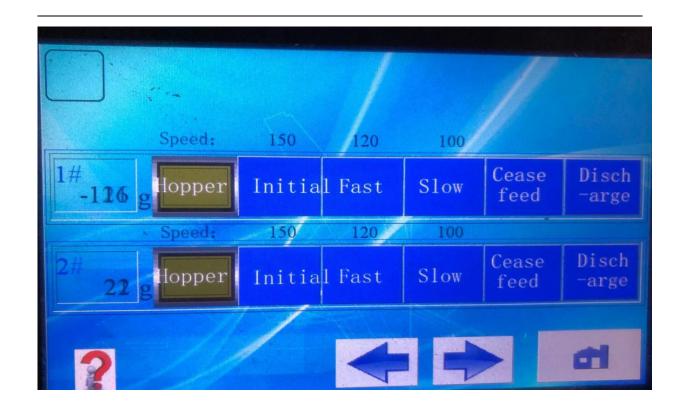
to be dark green when enabled, and the value of the boost time can be used to set it later.

## 7. 输入输出信号说明 Input/output Settings

在初始画面点击调试页面即可进入调试页面

Click the debug page on the initial screen to enter the debug page





#### 7.1输入

相关参数: "料斗光电"(0、1)\*

Related parameters: Hopper (0, 1)

料斗光电:此信号有两种方式。0时表示无信号,1时表示有信号。

Hopper: There are two ways of this signal. At zero, there is no signal, and at one time there is a signal

#### 7.2输出

相关参数:"初加"、"快加"、"慢加"、"停止加料"和"单次放料"

Related parameters: initial fast slow cease feed disch-arge

初 加:加料的第一个阶段,以初加振动量振动。

initial: The first stage of the feeding, vibration with initial vibration

快 加:加料的第二个阶段,以快加振动量振动。

fast: The second stage of the feeding, vibration with fast vibration

慢 加:加料的第三个阶段,以慢加振动量振动。

slow: The third phase of feeding, vibration with slow vibration

停止加料:单击即可停止振动器振动。

cease feed: Click to stop the vibration of the vibrator

单次放料: 秤斗打开放空料斗。

disch-arge: The weighing hopper opens the hopper