

# Web Monitoring System OR-A/B/C



## User Guide





# Catalogue

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## **Chapter 1 Brief introduction of C8000 web monitoring system**

### **1.1 Product introduction**

O+K series is a high-definition web monitoring system, using Japanese SONY imported global shutter CMOS camera, 5 million pixels, display resolution 1280\*960 and 1280\*720 can be selected, electric 30x optical zoom, shooting range includes (60mm\*45mm,100mm\*75mm 200mm\*150mm), the maximum linear speed of the machine is 1200M/min, the system power supply voltage is DC24V, the system can automatically cruise, and it is used in printing, labeling and other industries.

### **1.2 Safety precautions**

1.2.1 the input power supply voltage is DC24V. Please do not connect the AC220V voltage directly, which will cause system damage. Connecting the ground wire to the ground terminal of the system to ensure good grounding and ensure the stability of the system.

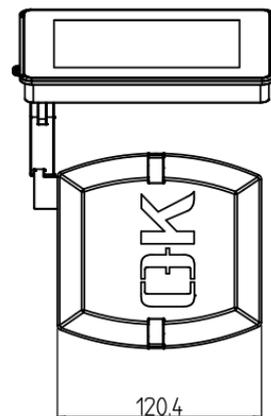
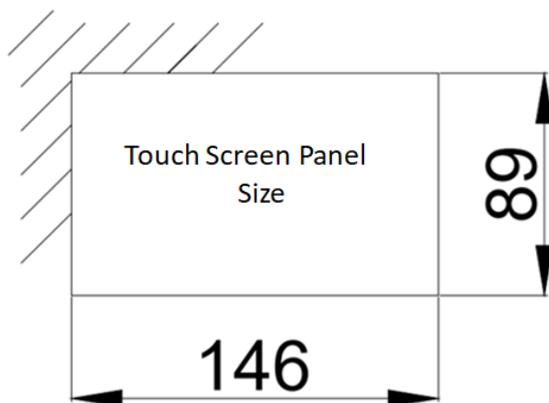
1.2.2 Ensure that there is enough space between the web monitoring system and the mechanical equipment, and no collision will occur.

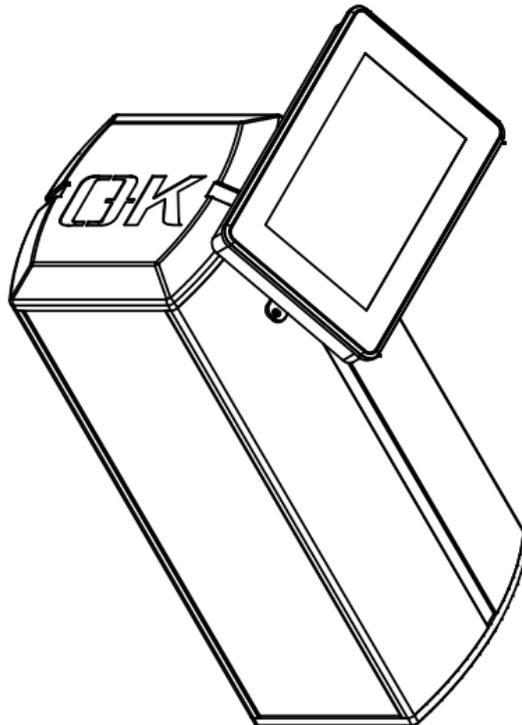
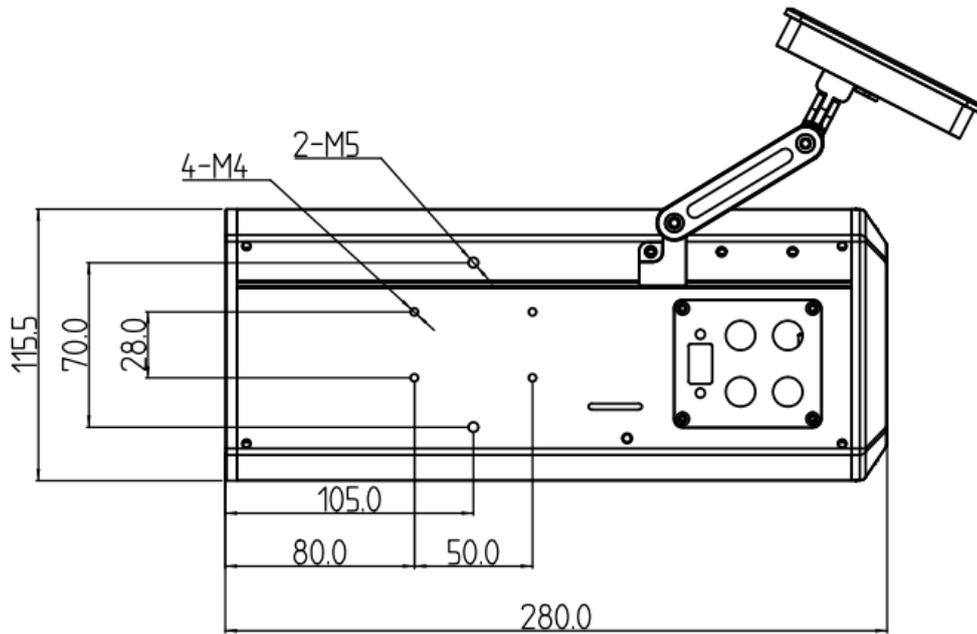
1.2.3 All connecting wires shall be kept in natural bending.

1.2.4 When the system is started and running, it is forbidden to plug and unplug all connecting wires.

## Chapter 2 Installation

### 2.1 Installation size and method

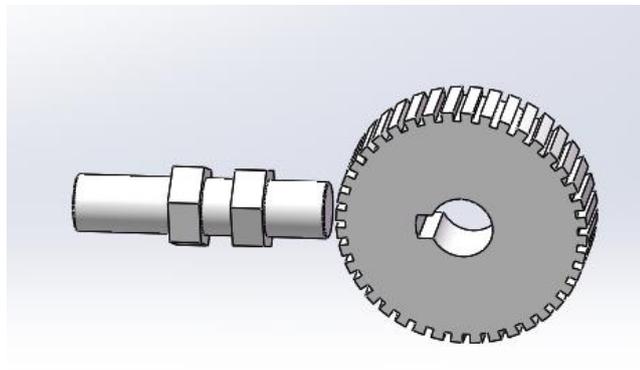




## 2.2 Installation of synchronous signal sensor

Sensors provide synchronization signals for the system:

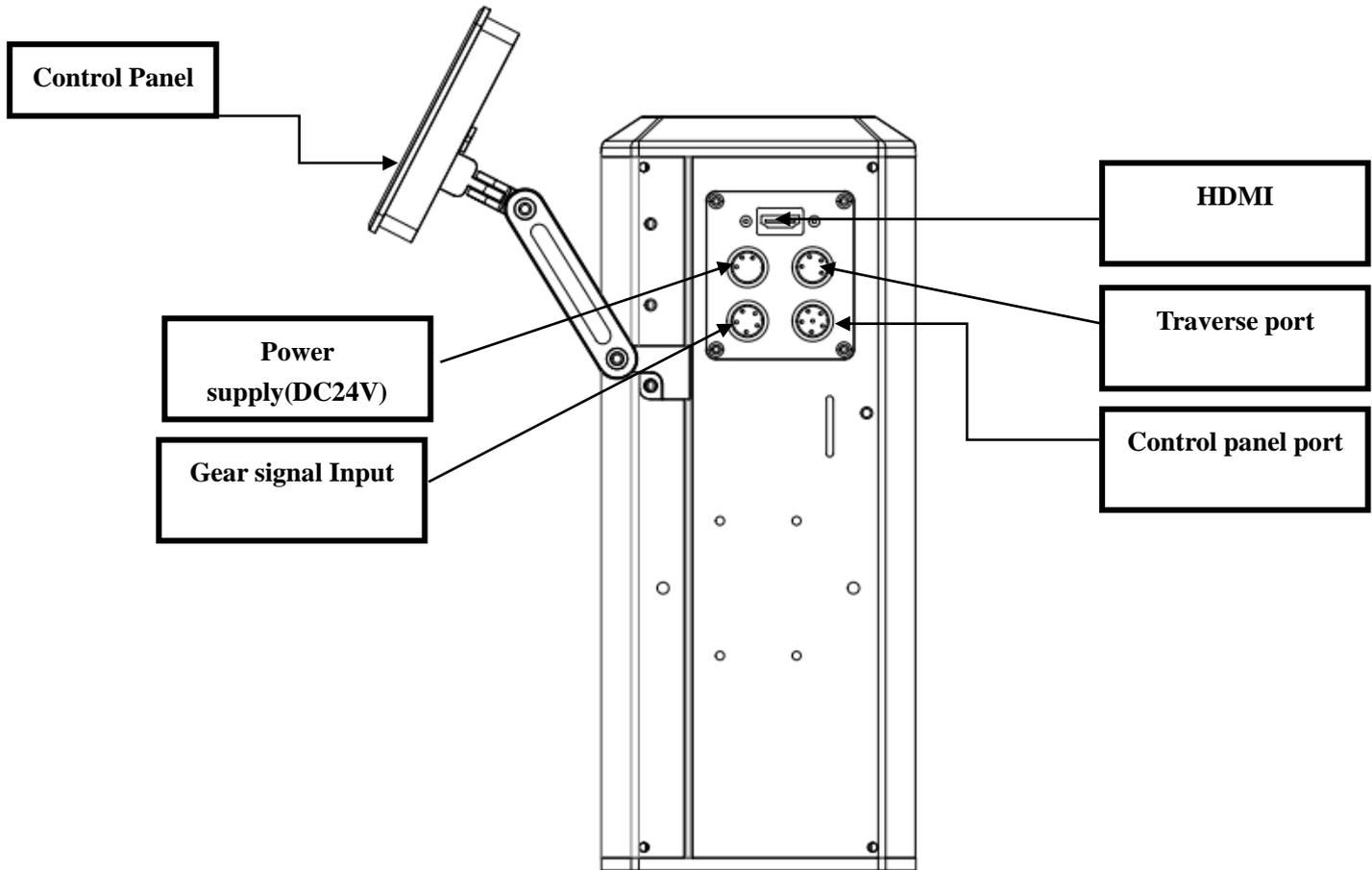
2.2.1 When using the proximity switch as the sensor, adjust the sensor and the gear to a suitable installation distance and fix it reliably (for example, the gear with synchronous printing plate roller speed). As shown in the diagram below, the installation distance is 0.5 mm ~ 1.5 mm.



2.2.2 When the encoder is used as a sensor, it is driven by the rotation of the guide roller to synchronize the encoder with the printing plate roller 1:1.

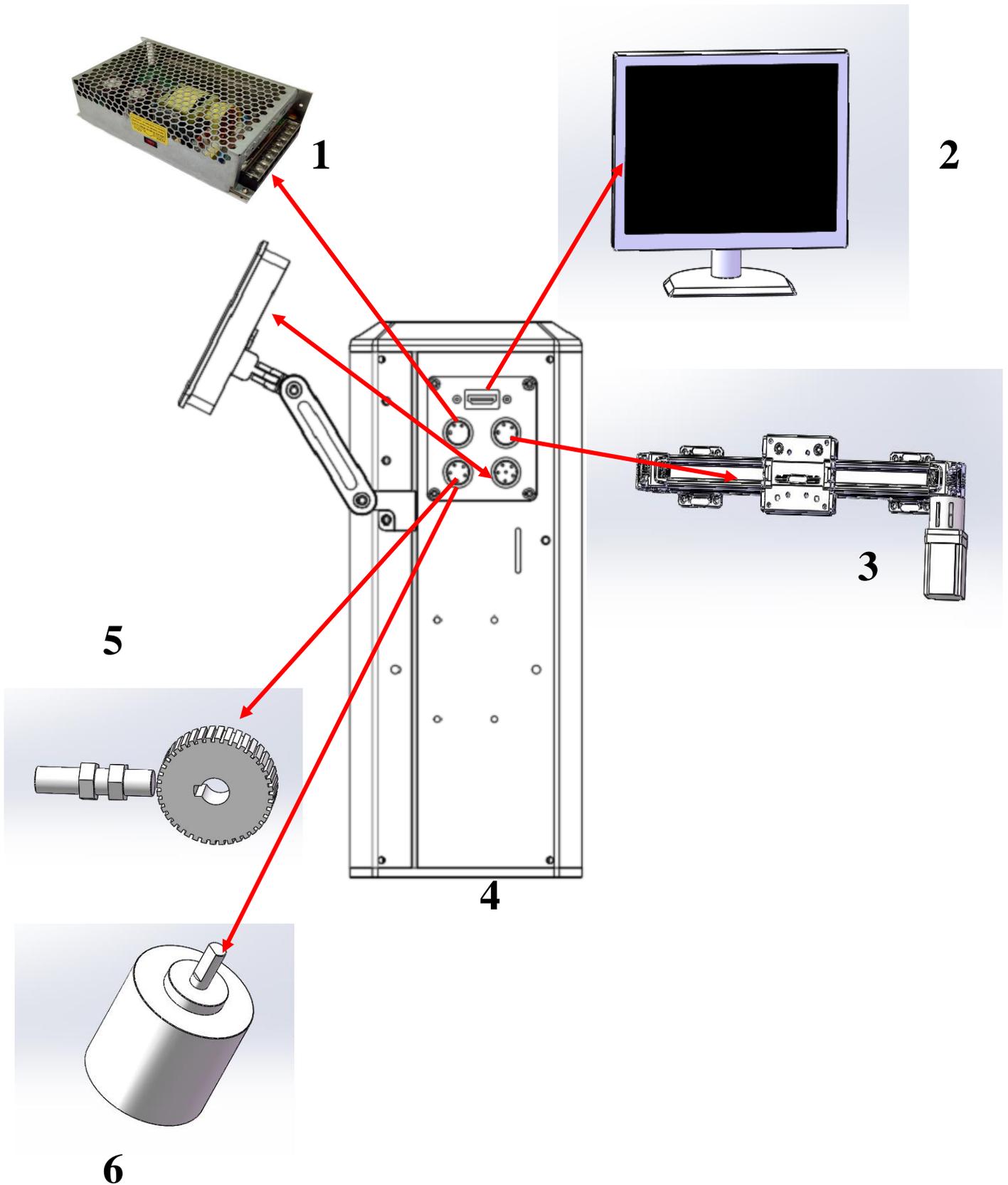
2.2.3 Synchronization signals on mechanical equipment or differential signals in servo system can also be used as force synchronization signals (e.g., plate roller gear tooth number signals).

### 2.3 System connection (attached drawing)



**⚠ Caution**  
Don't connect AC220V or  
380V

## 2.4 Wiring



### **Illustration:**

1. A switching power supply with input voltage of AC85-265V, output power of DC24V and power of 100W.
2. HD display, HDMI input, (optional for customers)
3. Linear module, automatic traverse system (optional for customers)
4. Web monitoring system's main body(Camera)
5. Synchronization signal proximity switch (optional for customers)
6. Synchronous signal encoder signal (optional for customers)

Definition of aerial plug cable for still picture system;

**Power cable:** 3-core cable, brown wire is connected to DC " V+", blue wire is connected to DC "V-". The black wire is connected to the PE.

**Motor cable:** 8-core cable. One end of the cable aviation plug is connected to the MOTOR interface of the web monitoring system.

**Gear sensor cable:** 5-core cable, brown-DC24V output, blue-GND, black-gear pulse number per repetition (synchronization signal input), white-differential signal positive terminal, gray-differential signal negative end.

**Touch screen panel cable:** 6-core cable, used to connect the operation screen and the interface of the network monitoring system for communication.

**HDMI cable:** High-definition cable, one end is connected to the monitor,



the other end is connected to the HDMI interface of the web monitoring system.

**Special instructions for the connection of the still picture system (OR-A)(Model A,visual range:60\*45mm):**

**Power interface:** 3-core cable, brown wire connects to DC "DC24 V+", "blue wire connects to DC "V-". Black wire connects to teeth number synchronization signal input (connect the gear sensor power cord and power supply in parallel).

**Touch screen cable:** 6-core cable, used to connect the communication of the operation screen, one end is connected to the operation screen, and the other end is connected to the DISPLAY port of the web monitoring system.

**VGA cable:** VGA cable, one end is connected to the VGA port of the monitor, and the other end is connected to the VGA port of the web monitoring system.

### Chapter 3 Description of Operating System

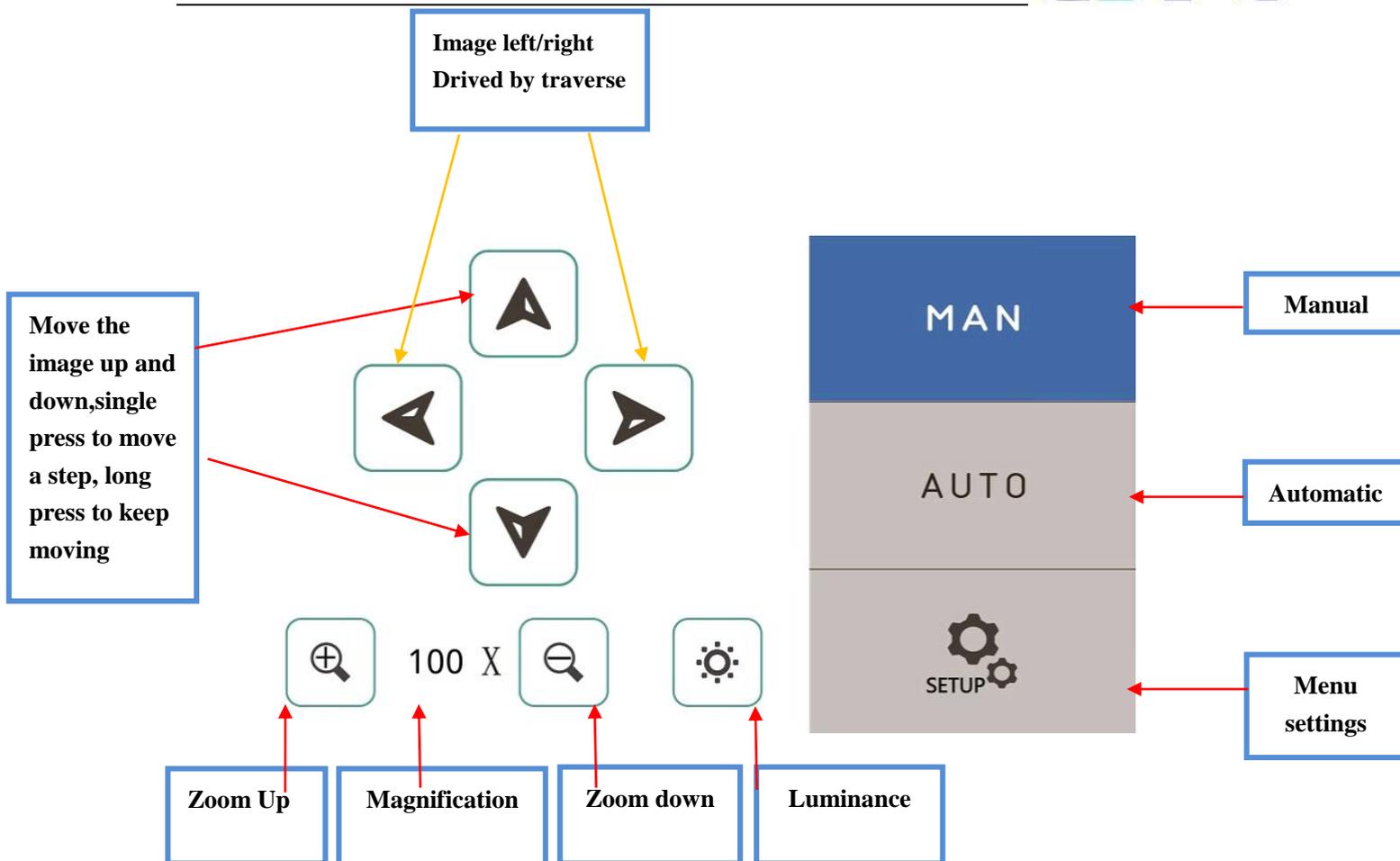
#### 3.1 Boot interface



Boot interface, at this time the system is loading, device scanning and data initialization.

#### 3.2 Menu parameter setting interface

##### 3.2.1 Introduction of main interface



## Interface description:

1. Touch the up and down keys to move the image up and down
2. Touch the left and right keys to move the image left and right(need to be equipped with the traverse system)
3. In manual mode, the camera can shoot 60 frames per second regardless of the synchronous signal
4. In the automatic mode, the camera takes pictures according to the synchronous signal, and the automatic traverse system can be triggered by touching the automatic key again (traverse system is required)

5. Magnification: the adjustment image can be adjusted by increasing and decreasing the magnification, and the adjusted magnification can be displayed at the same time. The adjustment range is (0-100)

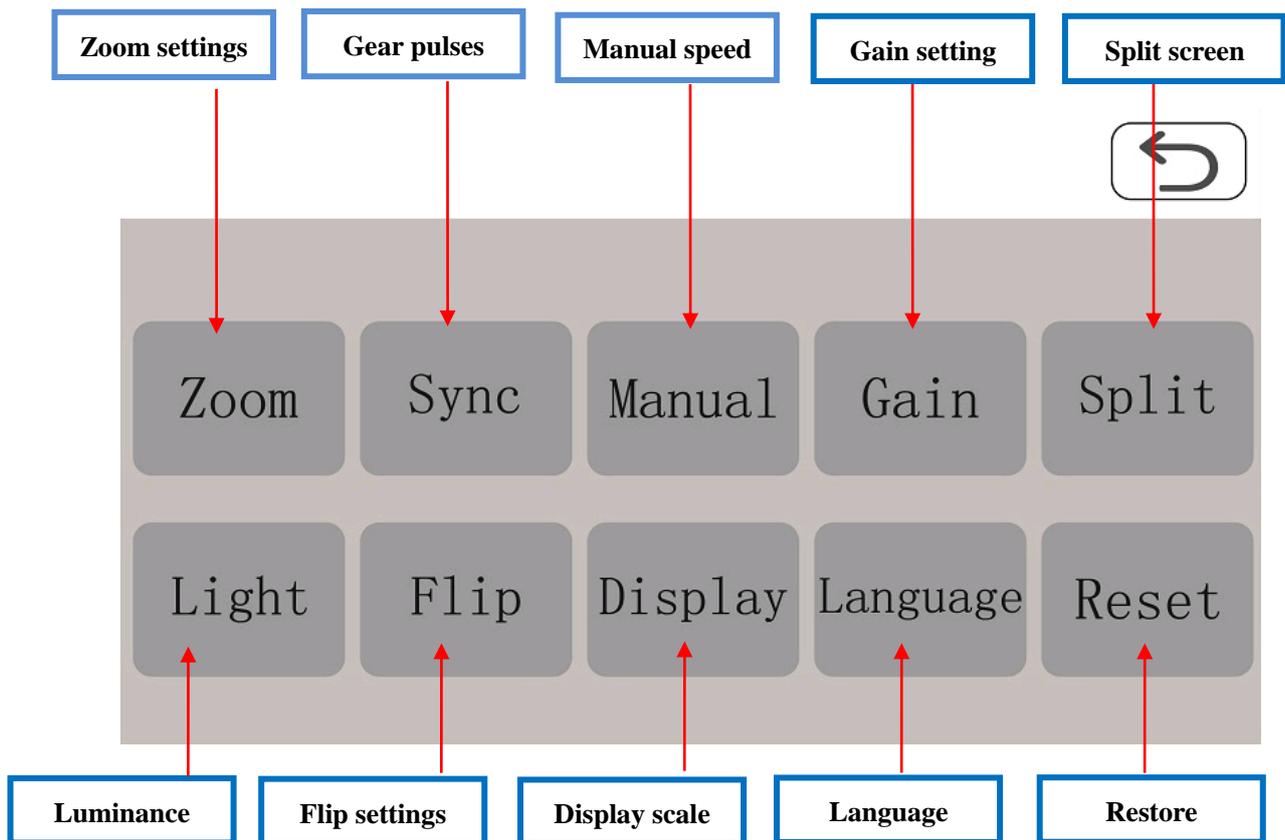
Remarks: The magnification for A-type and C-type is (0-16)

6. The luminanc interface can be quickly touched to switch

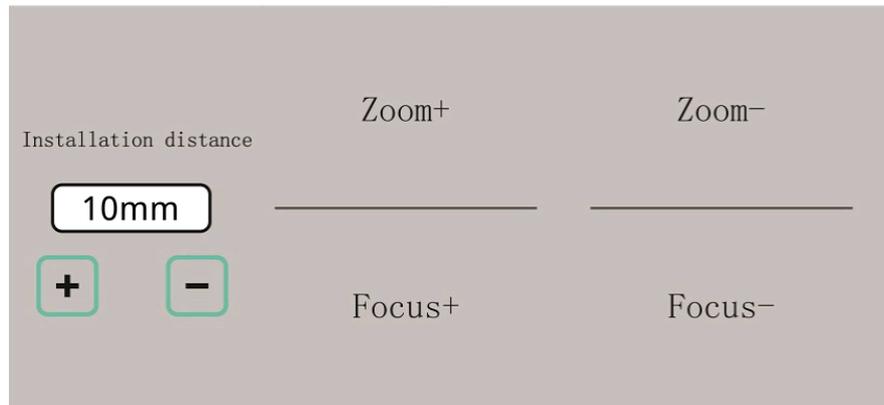
7. Menu settings

### 3.2.2 Menu interface

Touch the corresponding setting icon to enter the parameter setting



#### 3.2.2.1 Zoom settings



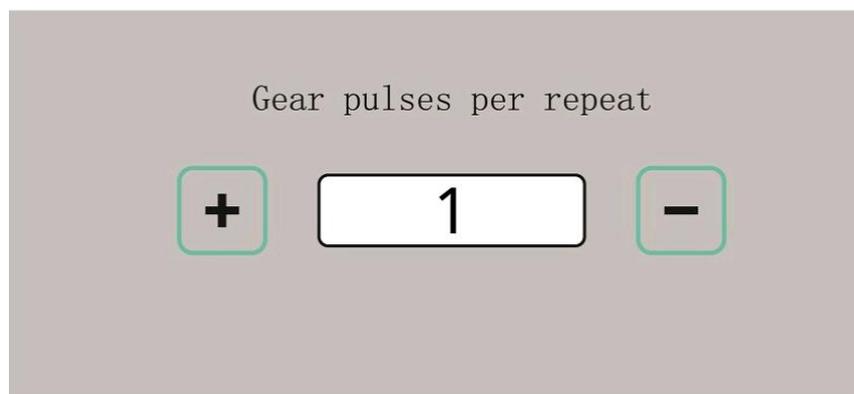
### Interface Description:

Focusing distance: refers to the distance from the bottom of main body to the material. The internal program is (5mm, 10mm, 15mm, 20mm). Users can select the corresponding focusing distance according to the installation distance, and modify it by adding or subtracting keys.

Zoom+ -: adjust the size of the picture, adjust the size of the picture as required, and adjust the focus after it.

Focus + -: adjust the picture to be clear by adding or subtracting keys.

### 3.2.2.2 Gear pulses(per repeat)



### Interface Description:

According to different input trigger signals, the number of gear pulses per repeat can be set, and the data can be input through the internal keyboard by adding or subtracting keys.

#### 3.2.2.3 Manual settings

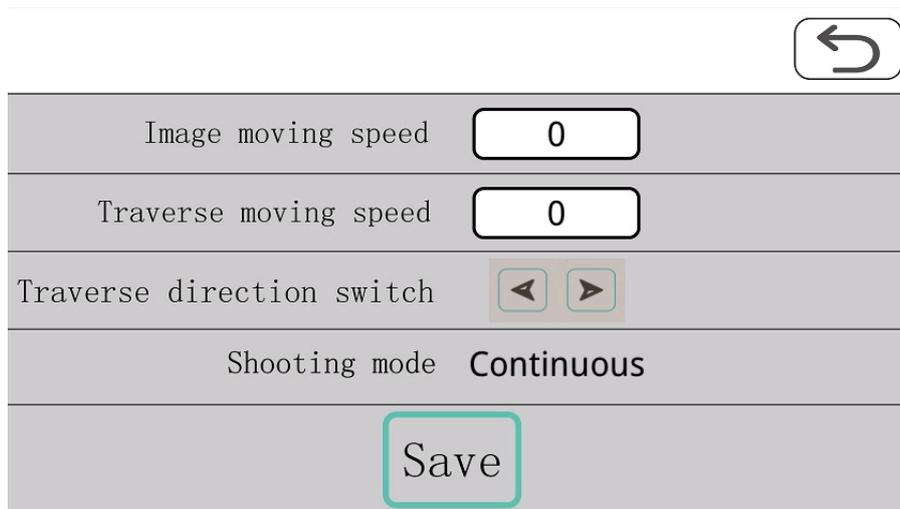


Image moving speed	0
Traverse moving speed	0
Traverse direction switch	◀ ▶
Shooting mode	Continuous
Save	

### Interface Description:

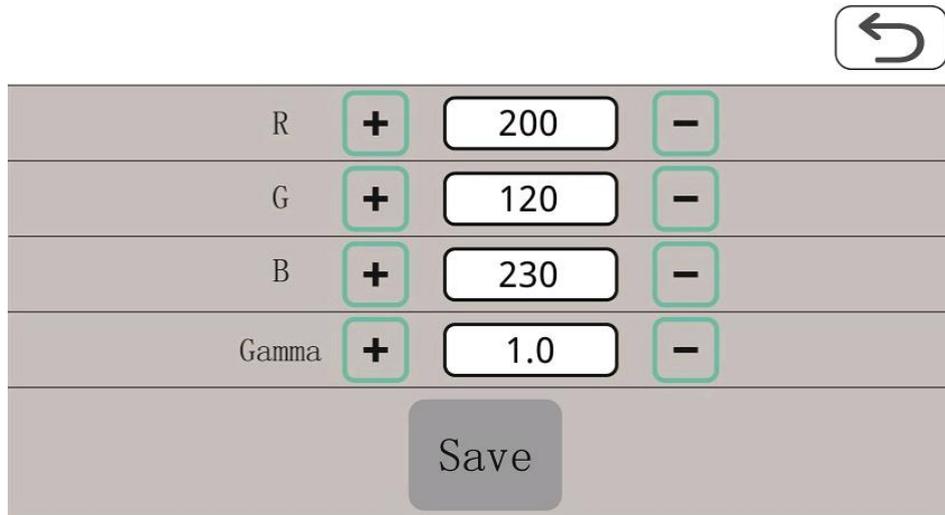
Image up and down speed: corresponding to the moving speed of the up and down buttons on the operation interface

Image left and right speed: The speed at which the screen moves left and right (traverse system is required), which can be modified through the internal keyboard of the touch screen.

Left and right directions: switch the running direction of the traverse motor (traverse system is required).

Shooting mode: select the way to take photos in manual mode or continuous capture.

### 3.2.2.4 Gain setting



R	+	200	-
G	+	120	-
B	+	230	-
Gamma	+	1.0	-
Save			

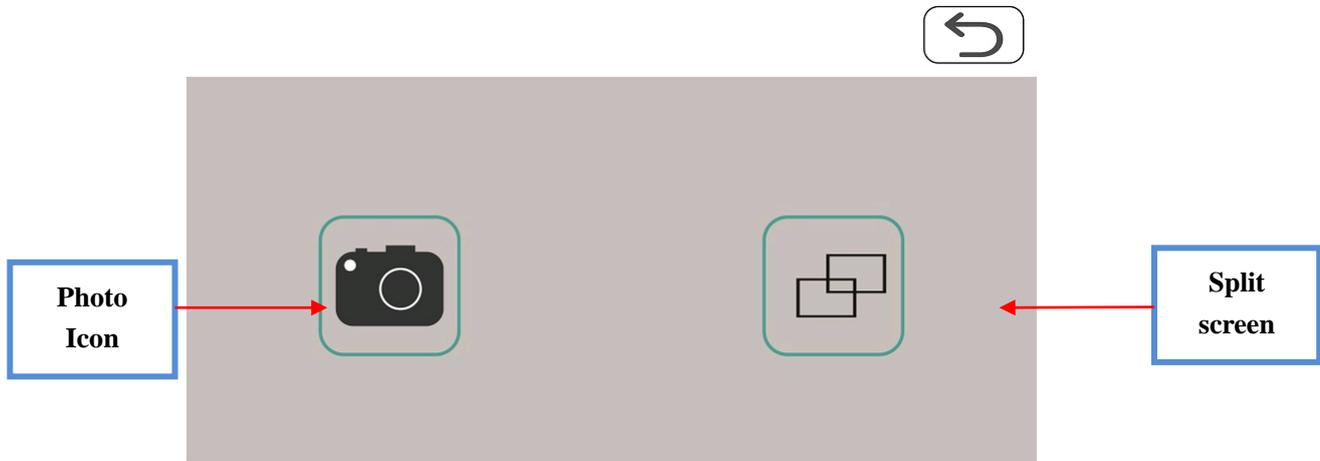
#### Interface Description:

Password: 62319036

RGB adjustment: by adjusting the RGB value, the screen can achieve the desired effect. The RGB adjustment range is (0-254). The adjustment method can be modified by using the internal keyboard of the touch screen by adding or decreasing keys.

Gamma adjustment: set different gamma code values according to the needs of the screen, and switch through the plus and minus keys.

### 3.2.2.5 Split screen



### Interface Description:

Photo icon: this icon is used to manually capture the observation screen of split screen.

Split screen switching icon: this icon is used for splitting the screen. By touching once again to turn off the split screen function.

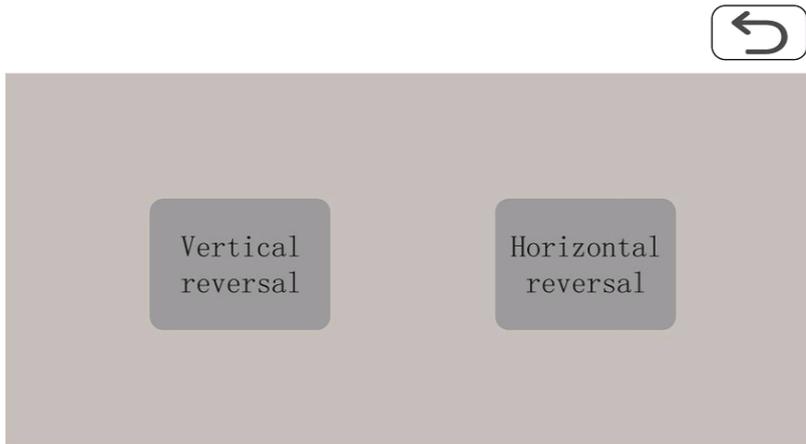
### 3.2.2.6 Luminance



### Interface Description:

Data input is carried out through the internal keyboard of the touch screen, and fine adjustment is performed by adding or decreasing keys, and the adjustment range is (0-63).

### 3.2.2.7 Flip settings



#### Interface Description:

Flip up and down (Vertical Reversal): touch the icon to turn the image up and down, and touch again to turn off the flip.

Flip left and right (Horizontal Reversal): touch the icon to turn the image left and right, and touch again to turn off the flip.

### 3.2.2.8 Display scale



#### Interface Description:

4: 3: corresponding to square screen display with resolution of 1280 \* 720.

16: 9: corresponding to wide screen display with resolution of 1280 \* 1024.

### 3.2.2.9 Language

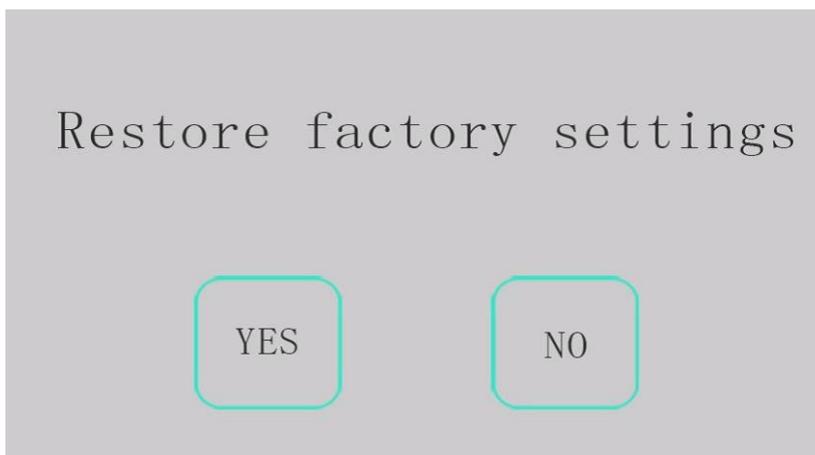


#### Interface Description:

Chinese: touch the Chinese icon, the system is in Chinese.

EN: touch EN icon, the system is in English

### 3.2.2.10 Restore



#### Interface Description:

Password: 62319036

When the system parameter setting is confused, touch the "yes" icon



to restore the factory settings (i.e. parameter initialization)

### **Chapter 4 Operation steps**

1. According to user needs, install the system parallel to the observation material to prevent poor picture effects due to the camera's incorrect focal length.

2. The focusing distance between the bottom of the body of the system and the observation material should be consistent with the focusing distance to achieve the best effect (The distance deviation is plus or minus 1 mm). The best distance between the the bottom of the body of the system and the observation material is 1cm(10mm).

3. Connect the power supply and synchronous signal trigger to the corresponding cable.

4. After the above steps are completed, insert the corresponding cable into the corresponding plug and power on for adjustment.

### Appendix

#### *1.Common faults and treatment methods*

after power on, there is no response and the control panel is not on. Check whether the output of DC 24V power supply is normal, whether the power line is in good condition, whether the power plug is in good contact, whether the wiring is positive or negative is correct, and then plug it in again.

#### *2.No response in automatic mode*

Check whether the synchronization number connecting cable is correct.

Check whether the tooth number pulse setting is correct.

#### *3.Power on-- black screen*

Observe whether the C8000 flash lamp flickers. If it does not flash, the c8000 has no image output and can try to power on again. Flicker indicates that C8000 has image output. Check whether HDMI cable is plugged in properly and whether display input source is HDMI input.