










PLC semi-automatic alignment system

Installation Manual

Equipment List

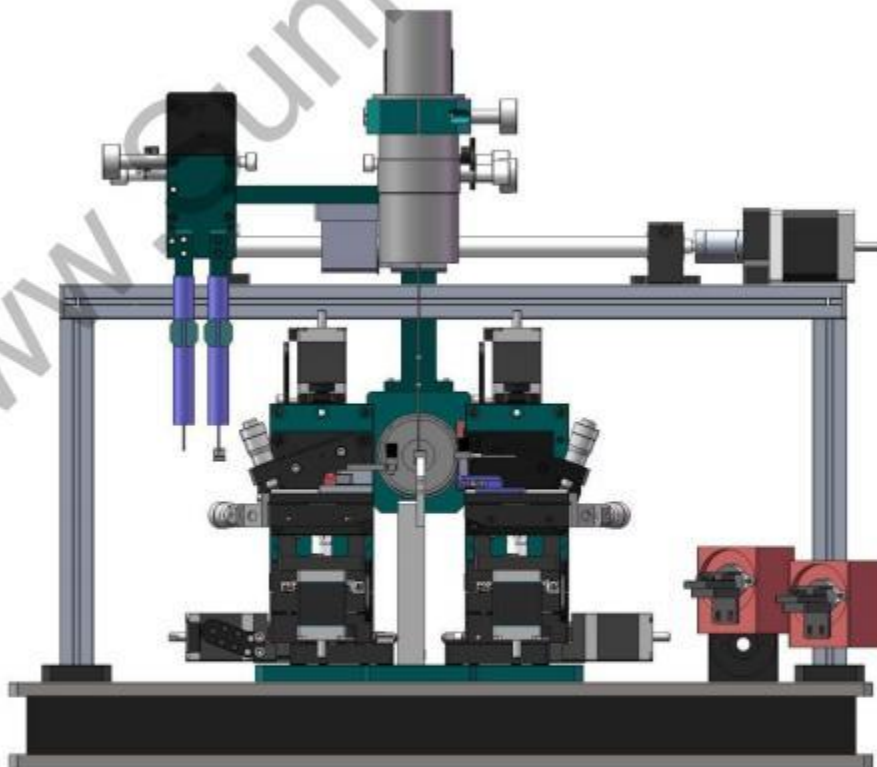
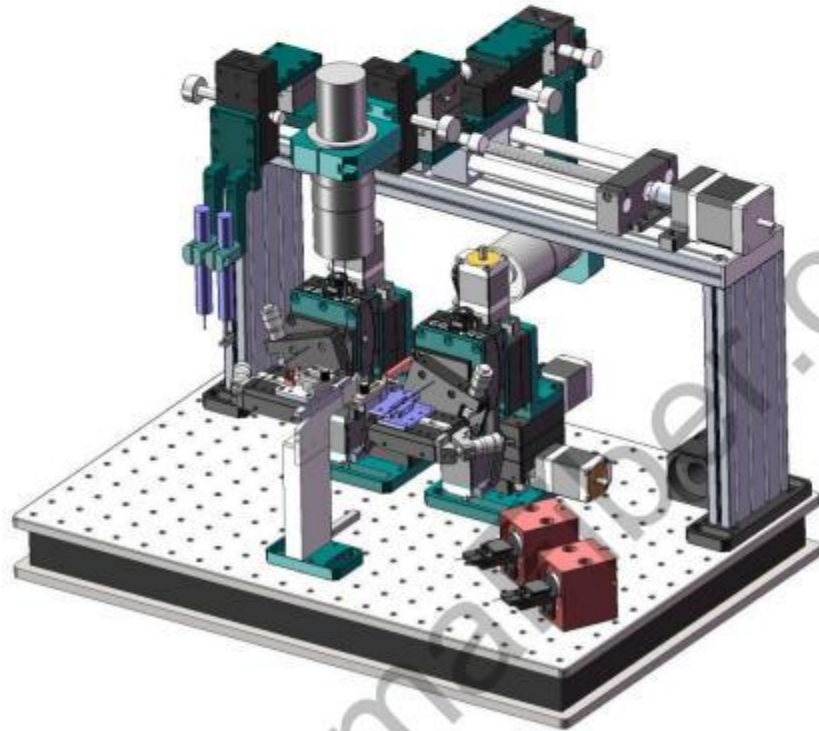
name	illustrate	Illustration
Six-axis translation stage	4-axis electric 2-axis manual	
FA and chip fixture	with sensor	
Fiber optic clamp	For power meters, three types are available	
sensor controller	2 channels	
Motion Controller	8 axis	
dynamometer	With 1310/650 light source, 3 channels	
computer	Configuration and appearance will vary. The basic configuration is Windows 10, 8G memory, and 128G hard drive. i3 or i5CPU.	
Keyboard and mouse	It is wired, so 2 USB ports are required.	
switch	The switch is of POE type and can directly power the camera through the network cable. There are three components that need to be connected to	

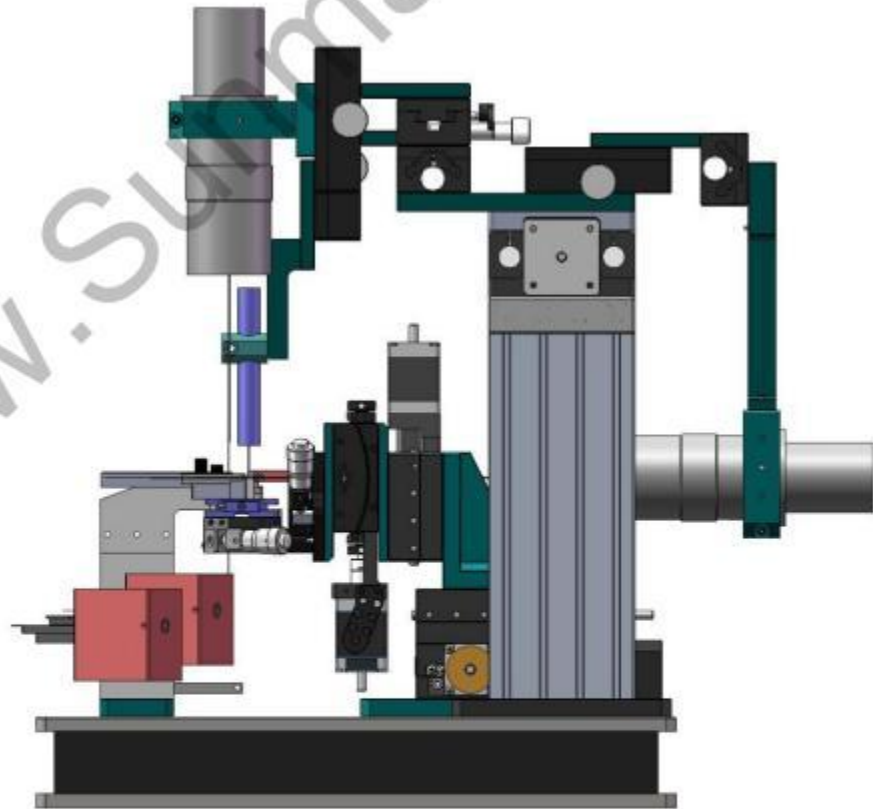
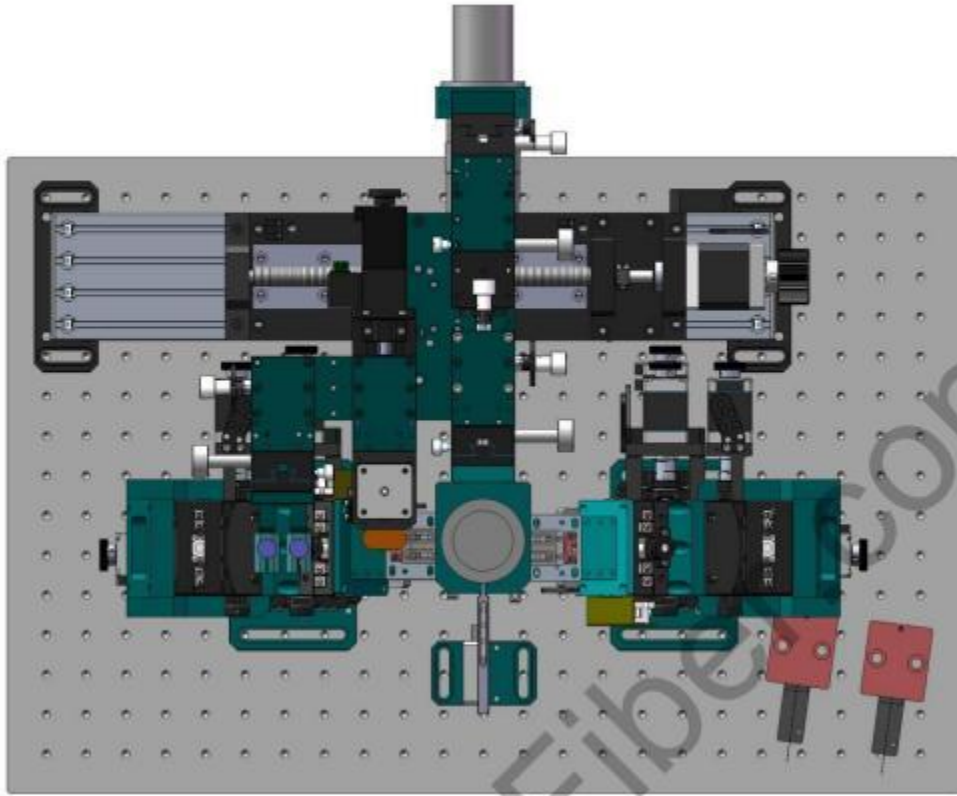
	the switch: 2 cameras, and the motion controller. The switch is connected to the network port of the computer	
lens		
ring light		
objective lens		
Industrial camera	The POE camera does not require a separate power supply and is powered by the switch through the network cable.	
Motor wiring	8 roots	
USB to serial port cable	For power meters and sensor controllers. Need to install driver.	
Sensor controller data line	1, the headphone plug is plugged into the controller, and the RS232 is directly connected to the computer or connected to the computer through a USB to serial port cable.	
UV light source control line		
Power meter probe	Can connect 3 commonly used fiber optic clamps	
Light probe cable	3 roots	
multimode optical fiber	1	

UV light source		
UV irradiation head	2 sticks	
Power Adapter	12V	
Gantry		
Long stroke electric displacement table		
Lens adjustment mechanism		
optical flat panel	500*350*50	

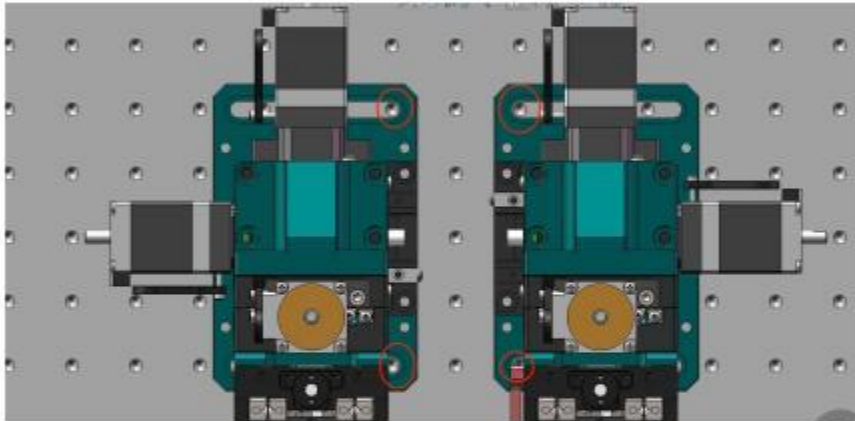
Assembly

The renderings of the entire system installed are as follows:





1. Six axis installation



Install as shown in the picture, using M6 screws.

2. Installation of observation unit

The list of observation units is as follows



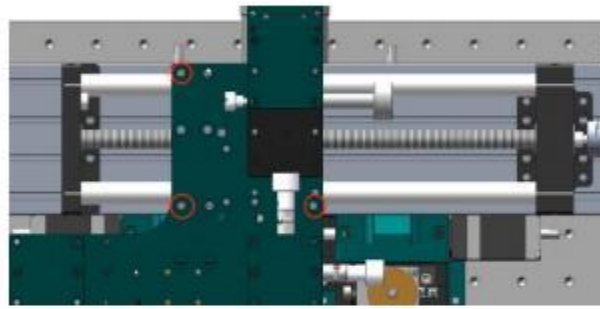
The renderings of the observation unit



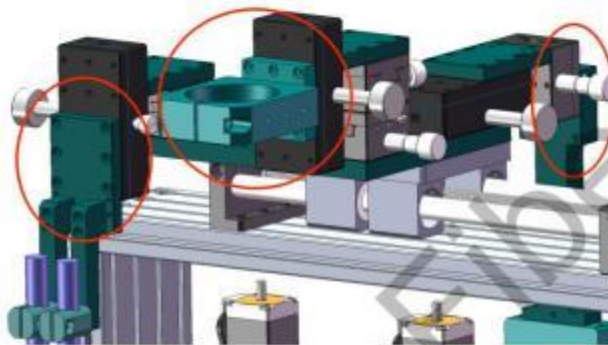
First, use 4 M4*20 screws to fix the legs of the gantry



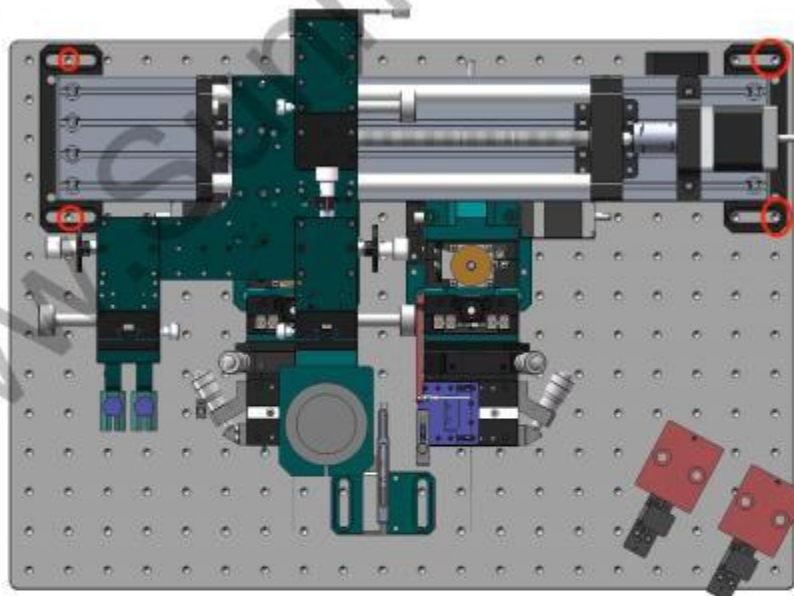
Use 3 M4*10 screws to fix it, as shown in the red circle in the picture:



Fix the 2 lens clamps (M3*10 screws) and UV clamp (M3*8 screws).



Fix the assembled part on the optical plate (M6 screws), as shown in the picture below.



Install as shown in the picture, using M6 screws. When installing the observation unit, it should be noted that the upper lens should face the position of the fixture below.

3. Install the lens

The lens has three parts, a lens with an eyepiece of 0.5x, a lens with an eyepiece of 1x, and a 0.5x objective lens. The 0.5x eyepiece lens is installed at the upper end, and the 1x eyepiece lens plus the 0.5x objective lens are installed in the horizontal position.

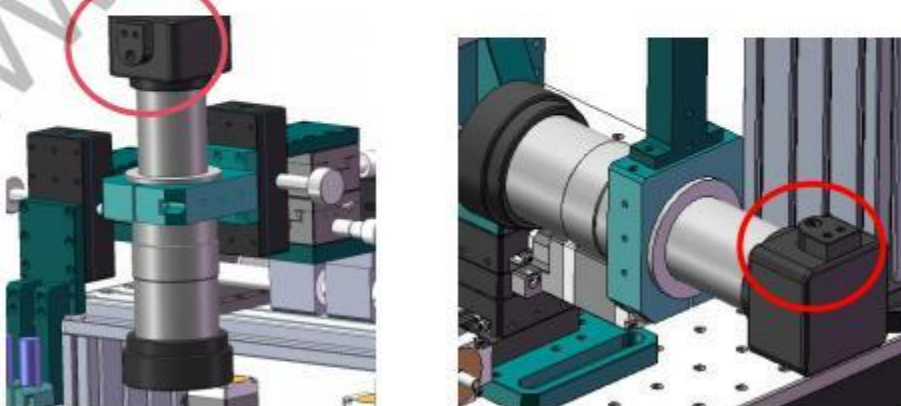


4. Install camera

When installing a camera, you must first remember the IP address of the camera. As shown in the figure, the configuration file of this address software will be used. The other is its protruding part. The upper lens should face outward and the horizontal lens should face upward, as the picture shows



This camera does not require a separate power supply and is powered by a network cable.



5. Install ring light

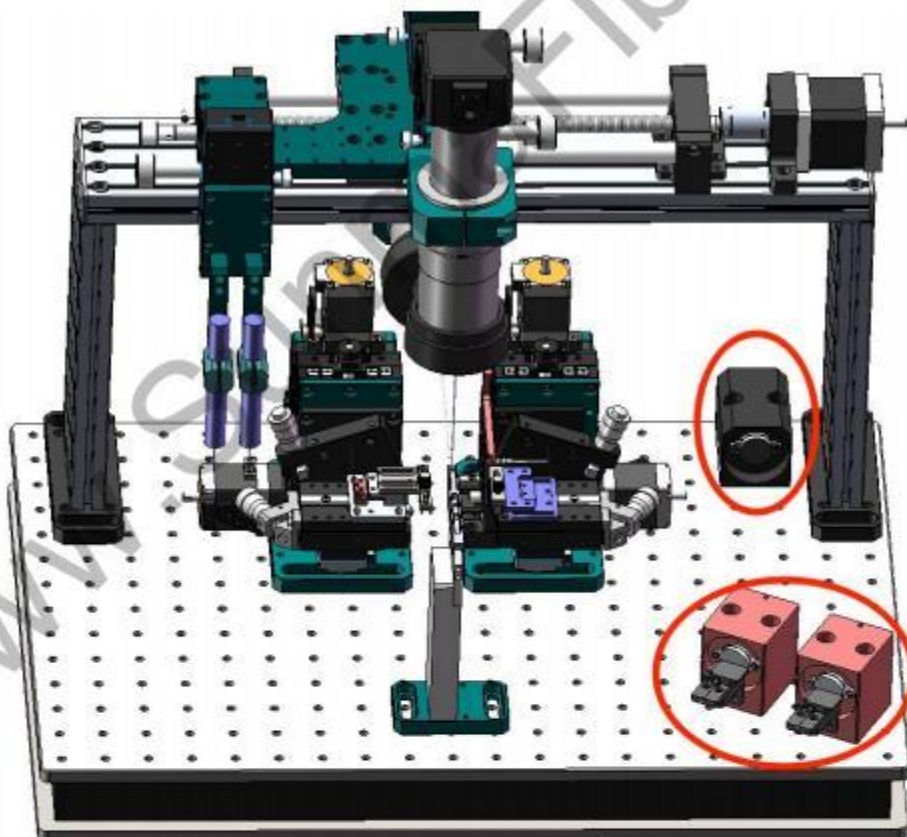
There are 2 sets of ring lights, one for each lens.

The brightness of the lamp is adjustable.



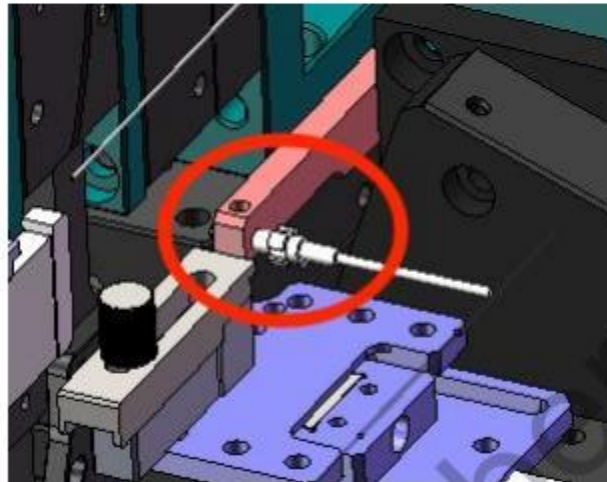
6. Install the power meter probe

The approximate layout of the power meter probe is as shown in the figure below. The red ones are P1 and P2, and the black ones are P3 (connected to multi-mode fiber). P1, P2, and P3 are connected to the corresponding interfaces of the power meter respectively.



7. Install multimode fiber

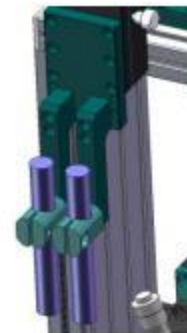
One end of the multimode optical fiber is connected to the power meter probe P3, and the other end is connected to the location in the figure below:



8. UV light source connection

UV light source is divided into main unit and irradiation head. For the operation of the host, please refer to the relevant operation manual.

One end of the two illumination heads is connected to channels 1 and 2 of the host, and the other end is installed as shown in the figure.



9. Software settings

10. Equipment wiring diagram

