

1 产品介绍

智光眼®工业相机根据使用场景，分为两类：

- 静态场景下，扫描时相机和物体保持相对静止。结合机械臂可进行抓取、上下料、分拣、焊接控制等多种行业应用。
- 动态场景下，相机和物体需要相对运动。适合物流包裹检测、皮带输送监控、工业产线质检等应用。

2 物品清单

- 相机 × 1
- 相机电源线 × 1
- 千兆网线 × 1

3 硬件安装

步骤1 根据实际情况，将相机固定在指定位置。静态场景和动态场景安装示意图分别如 **图1** 和 **图2** 所示。安装孔的相对位置和孔径请参考《相机装配图》。

- 静态场景安装方向：双目镜头的连线与检测物体宽度方向平行。
- 动态场景安装方向：双目镜头的连线与检测物体（或相机）运动方向平行。
- 激光器方向：激光器打出的激光束与检测物体（或相机）运动方向垂直。
- 相机安装高度：根据相机出厂标签上的标定范围取最大数值为安装高度。

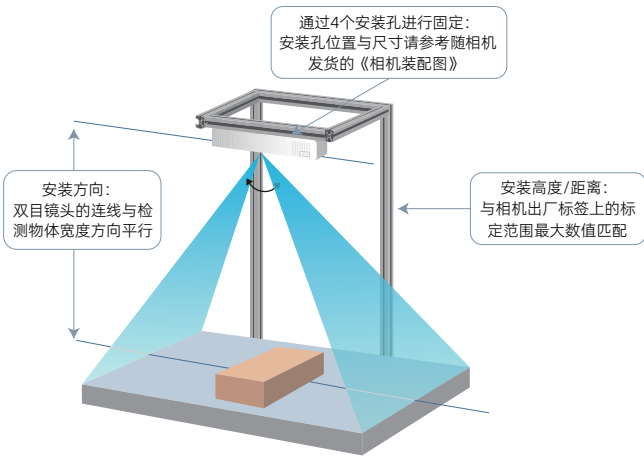


图1 静态场景相机安装示意图

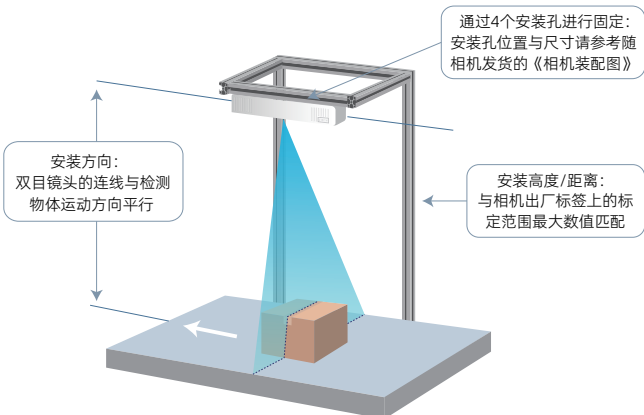


图2 动态场景相机安装示意图

步骤2 连接线缆。

- 参考 **图3**，连接电源线和网线。
- 安装电源线时，请先连相机端，然后再连供电端。

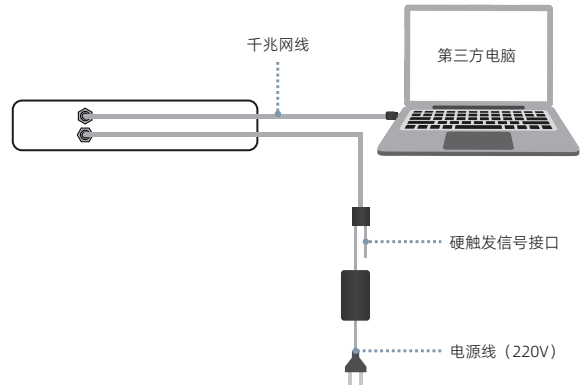


图3 线缆连接示意图

步骤3 安装检查。

- 确保设备安装牢靠、电缆不松动。
- 确保工作时相机不抖动。

4 注意事项

注意 本设备为高精度设备，请阅读并遵守下面的要求：

分类	项目	要求
相机安装板	材质	铝合金6061-T6。
	厚度	10mm及以上。（如果现场环境恶劣，振动大，安装板悬臂长，需要在安装板背面增加加强筋）
	安装面平面度	≤0.1mm。
电源	效果	安装后相机底面应完全贴合，无翘曲变形。
	电源输入	相机电源输入：24V±4V 电流≥2A 符合接地规范。220V交流电需提供符合国标。
	设备上电	安装电源线时，请先连设备端，然后再连供电端。
设备	断电要求	安装设备和拆除设备时，必须先断开电源。
	稳定	确保设备安装牢靠、电缆不松动。确保工作时设备不抖动，以免影响精度。
	结构	请轻拿轻放设备，避免使其受到强烈的冲击或震动。
	电磁	切勿将设备靠近强磁物品。请做好静电防护并使设备远离电磁辐射。
	清洁	请持续保持设备玻璃视窗的清洁。
人员安全	完整	切勿擅自拆卸设备，同时确保各类配件的完整。
	人身安全	请谨慎操作，安装时避免划伤、砸伤或坠落。
	保护	切勿直视激光，同时避免激光照射皮肤。

说明

- 由于产品升级或其他原因，本文档内容会不定期进行更新。除非另有约定，本文档中的所有内容不构成任何明示或暗示的担保。
- 如需了解更多内容，请参考《智光眼用户指南》。



1 Product Introduction

The ViEye® industrial camera is classified into two categories based on application scenarios:

- In static scenarios, the camera and the object remain stationary relative to each other during scanning. When integrated with a robotic arm, it can be used for a variety of industrial applications, including gripping, loading and unloading, sorting, and welding control.
- In dynamic scenarios, the camera and the object must be in relative motion. It is suitable for applications such as logistics package inspection, conveyor belt monitoring, and quality inspection on industrial production lines.

2 Bill of Materials

- Camera × 1
- Camera Power Cable × 1
- Gigabit Ethernet Cable × 1

3 Hardware Installation

Step 1 According to the actual situation, mount the camera in the designated position. Installation diagrams for static and dynamic scenarios are shown in *Figures 1 and 2*, respectively. For the relative positions and diameters of the mounting holes, please refer to the Camera Assembly Drawing.

- Static scenario installation orientation: The line connecting the dual lenses should be parallel to the width direction of the object being inspected.
- Dynamic scenario installation orientation: The line connecting the dual lenses should be parallel to the movement direction of the object (or the camera).
- Laser orientation: The laser beam emitted by the laser module should be perpendicular to the movement direction of the object (or the camera).
- Camera installation height: Use the maximum value of the calibration range indicated on the camera's factory label as the installation height.

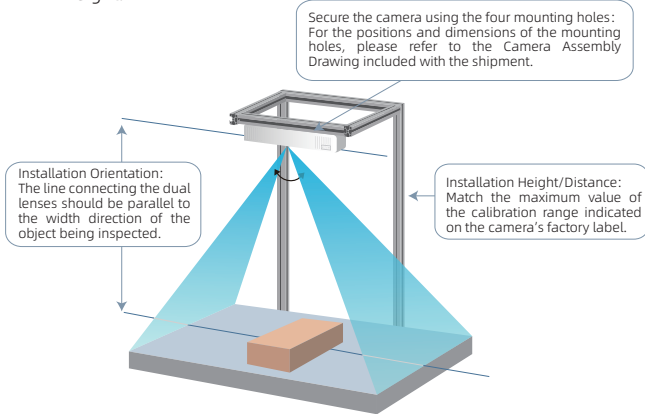


Figure 1 Static Scenario Camera Installation Diagram

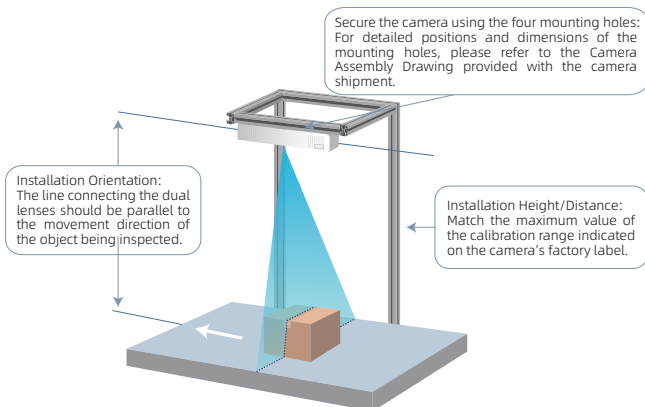


Figure 2 Dynamic Scenario Camera Installation Diagram

Step 2 Connect the Cables

- Refer to *Figure 3* to connect the power cable and Ethernet cable.
- When installing the power cable, connect the camera end first, then connect the power supply end.

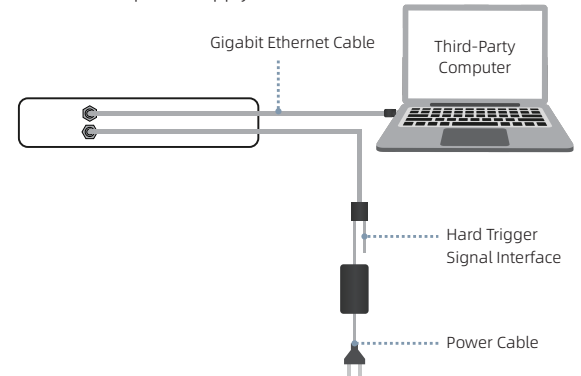


Figure 3 Cable Connection Diagram

Step 3 Installation Check

- Ensure the device is securely mounted and all cables are firmly connected.
- Verify that the camera does not shake during operation.

4 Precautions

Caution This device is a high-precision equipment. Please read and follow the requirements below:

Category	Item	Requirements
Camera Mounting Plate	Material	Aluminum Alloy 6061-T6.
	Thickness	10mm or greater. (Note: If the onsite environment is harsh with high vibration or long mounting plate cantilevers, reinforcement ribs must be added to the back of the plate.)
	Surface Flatness	≤0.1mm.
Power	Installation	The bottom surface of the camera must be fully flush with the mounting plate after installation, ensuring no warping or deformation.
	Power Input	• Camera power input: 24V ± 4V, current ≥ 2A, complies with grounding regulations. • 220V AC must meet national standards.
	Power On / Power Off	When installing the power cable, first connect the device side, then connect the power supply side. When installing or removing the device, the power supply must be disconnected first.
Equipment	Stability	Ensure that the device is securely installed and the cables are not loose. Make sure the device does not shake during operation to avoid affecting accuracy.
	Structure	Please handle the device with care to avoid strong impacts or vibrations.
	Electromagnetic	Never place the device near strong magnetic objects. Ensure proper electrostatic protection and keep the device away from electromagnetic radiation.
	Cleaning	Please continuously keep the device's glass window clean.
Personal Safety	Completeness	Never disassemble the device without authorization, and ensure that all accessories are complete.
	Safety	Handle with care during installation to avoid scratches, impacts, or dropping.
	Protection	Never look directly at the laser, and avoid laser exposure to the skin.

Note

- Due to product upgrades or other reasons, the contents of this document are subject to periodic updates. Unless otherwise specified, nothing in this document constitutes any express or implied warranty.
- For more information, please refer to ViEye User Guide.

