Caddx Infra V2

Quick Start Guide

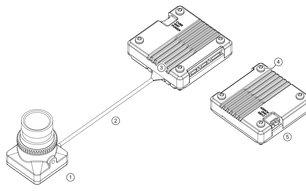
V1.1



■ Product Introduction

The main features of the Infra V2 black & white night vision simulation camera are as follows:

- Reduced Size and Dimensions:
  Utilizing a brand-new optical design to reduce lens size while ensuring the same light intake as Infra V1, making installation easier;
  Adopting a higher-grade AI processing chip to reduce the size of the processor module, resulting in a thinner and lighter device.
- AI Image Enhancement Camera:
  Equipped with the new generation Infra V2 AI night vision enhancement algorithm, improving image clarity by over 30% in low-light environments;
  Using AI multi-frame algorithms to enhance dynamic range during night vision, effectively suppressing overexposure/underexposure in backlit scenes and preserving full image details.

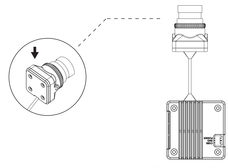


1. Infra Camera V2
2. Coaxial Cable
3. Camera Port
4. M2 Hole
5. Power Port

*This product is a visible light camera.

■ Installation Direction

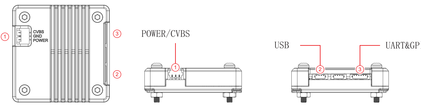
*Please install with this side facing down to avoid the image being upside down.



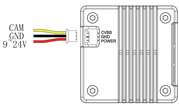
Caddx Infra Camera

■ Interface Definition and Connection

Interface Definition



- Connection Method and Function



Power / CVBS Connection:
1.POWER: FC solder pad, 9-24V
2.GND: Connect to the GND
3.CVBS: Connect to the FC CAM interface

- UVC Connection Method and Output Function

After the USB2.0 interface is wired according to the line sequence in the figure below, connect the computer to power on the Infra V2 module, and the computer can read the camera image, as shown in Figure 1.1.

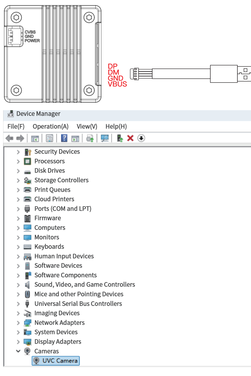
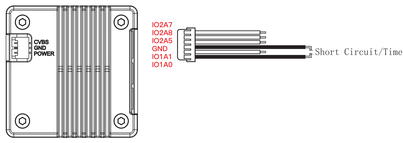


Figure 1.1

- NTSC/PAL Switch Connection Method

IO1A0 and GND should be short-circuited for 1s each time to switch the mode once. After the mode switch is completed, the device will restart automatically. The default mode is P mode when the product is first unpacked, as shown in the diagram.



■ Specifications

Name	Caddx Infra V2
Model	TR1-211SL
Image sensor	1/1.8 inch
Pixel size	8μm
Horizontal resolution	1500TVL
Focal length	2.8mm
Aperture	F1.0
FOV	131.6° (D)
Output format	CVBS PAL
Frame rate	50fps
Image quality	Black&White
Aspect ratio	4:3
Video interface	1xPAL
Supply Voltage	9~24V
Typical Power Consumption	<1.2W
Operating temperature	-20℃~60℃
Dimensions	Camera: 20.5x20.5x26.9mm AI Box: 34x34x13.2mm

Caddx Infra V2

使用说明

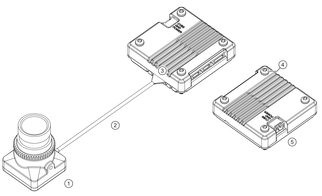
V1.1



■ 产品简介

Infra V2黑白夜视模拟相机主要特征如下:

- **减少体积尺寸:**
  在确保与Infra V1同等进光量的前提下，采用全新的光学设计，减少镜头的尺寸，更加易于安装；
  采用更高工艺AI处理芯片，减少处理器模块尺寸，更加轻薄。
- **AI 画质增强相机:**
  搭载Infra V2全新一代AI夜视增强算法，低光环境下，画面清晰度提升30%以上；
  采用AI多帧算法，提升夜视下的动态范围，有效抑制逆光场景过曝/欠曝问题，保留全画面细节。

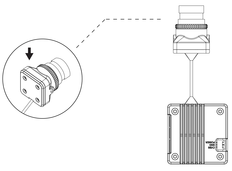


1、Infra 相机 V2　　2、同轴线　　3、相机接口
4、M2 孔　　5、电源端口

*此产品为可见光摄像头

■ 安装朝向

*安装时请根据此画面朝向向下，以免图像画面颠倒



Caddx Infra Camera

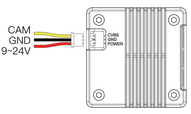
■ 接口定义与连接方式

接口定义



连接方式与功能

- **连接电源方式**



电源/CVBS接线：
1.POWER：飞控焊盘9~24V
2.GND：接负极线(GND)
3.CVBS接入飞控CAM接口

- **UVC连接方式与输出功能**

USB2.0 接口按照下图线序接线后，连接电脑给Infra V2模块上电，电脑即可读取到摄像头画面，如图1.1所示。

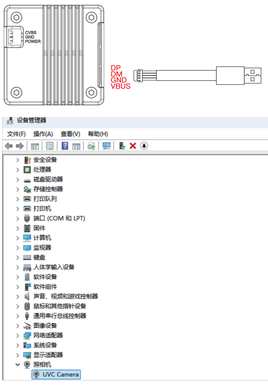
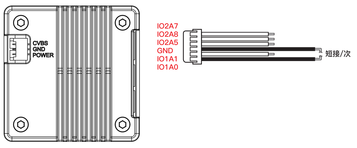


图1.1

- **NTSC/PAL切换接线方式**

IO1A0 与 GND 每次短接1秒将会进行一次切换制式，制式切换完成后重启机器；首次开箱产品默认为P制，如示意图所示。



■ 产品规格

名称	Caddx Infra V2
型号	TR1-211SL
图像传感器	1/1.8 inch
像元尺寸	8μm
水平分辨率	1500TVL
焦距	2.8mm
光圈	F1.0
FOV	131.6°(D)
输出格式	CVBS PAL
帧频	50fps
画质效果	黑白
画面比例	4:3
视频接口	1*PAL
供电范围	9~24V
功耗	<1.2W
工作温度	-20℃~60℃
尺寸	Camera: 20.5*20.5*26.9mm AI Box: 34*34*13.2mm