智慧青瞳

SMART JADE EYE

图像型火灾探测器

Video Fire Detector

使用说明书

User Manual

在安装和使用产品之前，请仔细阅读本说明书！

Please read this manual carefully before installing and using the product !

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第一章 简介

图像型火灾探测器（VFD / SF-JBF-DG12）是青鸟消防股份有限公司推出的具有自主知识产权的新型分布式智能火灾报警探测器。

本产品配备高清可见光图像传感器和近红外波段的图像传感器，支持双光谱视频实时输出，搭载高性能处理器运行智能图像分析算法，对双光谱图像进行实时分析，提取敏感区域并进行复合逻辑分析，实现复杂场景中对火灾的快速识别和响应，有效降低了视野中光线变化和运动物体的干扰，大幅度提高火灾识别率，实际使用中误报率极低；支持探测器现场声光报警、后台图像报警自动抓拍、对接火灾报警控制器、支持火灾报警和联动控制功能；具有智能化、实时化、可视化、大空间覆盖、高灵敏度等特点。

可广泛应用于各种大场景、开放性环境下的消防预警，如商场、仓库、储煤仓、候车室、影剧院、体育馆、展览中心、古建筑、飞机库、储油罐、电力设施、石化设施、冶金工厂等。

1.1 特点

1） 使用高清可见光和近红外图像传感器双光谱成像架构，搭载前端实时图像处理技术，实现多种维度火灾特征分析，可同时识别火灾的色彩、形态等特征信息，能够实现单一参数报警或多参数复合报警。

2） 采用非接触探测，与传统探测器相比，响应速度快，识别率高、误报率低，几乎不受扰流、烟障、空气隔阻等影响。

3） 运行自主研发的神经网络 AI 算法，多维度复合分析逻辑，适应复杂工作环境；并搭载自主研发的智能化标定算法，轻松实现快捷部署和现场定位标定。

4） 探测器机身内承载算法进行实时分析，可批量部署实现大范围火灾检测和报警。

5） 图像型火灾探测器监控部分可显示探测部分的实时高清画面、火点位置、报警状态和报警信息。可精确框定并给出具体火点坐标值，便于操作人员迅速定位火点和了解火场情况。

6） 系统提供准确详细的故障信息，可随时掌握探测部分的运行状态，操作便捷、清楚、直观。

7） 实时高清视频硬编码，支持 H.264 编码格式，可实时播放高清视频，报警即时抓拍图片，方便进行可视化验证和确认。

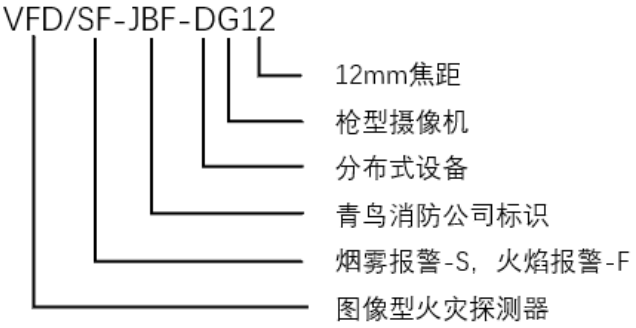
8） 支持前后端实时同步声光报警，探测端现场和监控中心联动响应，并支持无缝对接火灾报警控制系统和安防监控系统。

9） 支持光纤网络直出，可实现最远 25 公里无中继传输；支持超宽电源波动范围，满足多种常见供电规格，如 DC12V，DC24V，AC12V，AC24V 等，具备过流/过压/防雷保护。

10）整机具备完全的国产知识产权，无任何进口器件依赖。并具备 IP66 防护等级，支持工业级

温宽，满足 ESD3 级防护，各项电磁兼容性测试严苛程度超出国标要求 30%以上。

1.2 产品型号及代表意义



1.3 参数

1）图像型火灾探测器探测部分

名称	部件名	规格
可见光传感器主要参数	传感器类型	CMOS
	像素数	200 万像素
	分辨率	1920×1080
	镜头规格	12mm 定焦
	视场角	水平 22°，垂直 17°
	镜头光圈	F1.8
近红外传感器主要参数	传感器类型	CMOS
	像素数	200 万像素
	分辨率	1920×1080
	镜头规格	12mm 定焦
	镜头光圈	F1.8
网络	网络协议	RTSP、RTP over TCP/UDP
	视频压缩标准	H.264，H.265
接口	以太网接口	单模 SC 光纤接口（25KM）/RJ45 网口，支持二选一配置
	继电器	3 路继电器无源输出，触点容量 30V/2A

名称	部件名	规格
环境特性	工作温度	-20℃～+65℃
	相对湿度	＜95%(无凝露)
	贮存温度	-30℃～+70℃
声光指示	运行	绿色常亮/无声音
	故障	黄色常亮/2S 频率长间隔蜂鸣
	火警	红色常亮/0.5S 频率短间隔蜂鸣
供电电源	电压	额定 DC24V，可支持 DC12～32V，防反接，过流/过压保护
	功耗	≤5W
外形尺寸及重量	外观尺寸	L 245 mm ×W 125 mm ×H 99 mm
	安装接口	标准云台 1/4 英制螺口*2
	重量	1.8kg
	防护等级	IP66
探测精度	0.1 ㎡正庚烷火盆，5～200m*	

注：* 为实验室理想环境实测数据，推荐实际使用距离 120m 以内。

2）图像型火灾探测器监控部分

名称	部件名	规格
供电电源	主电	AC187~242， 50Hz
外形尺寸及重量	外观尺寸	L 442 mm×W 325 mm×H 310 mm
	重量	10kg
接口	串行口	CAN 总线接口*1
环境特性	工作温度	-10℃～+55℃
	相对湿度	＜95%(无凝露)
	贮存温度	-20～+65℃

1.4 外形尺寸

1）图像型火灾探测器探测部分外形尺寸

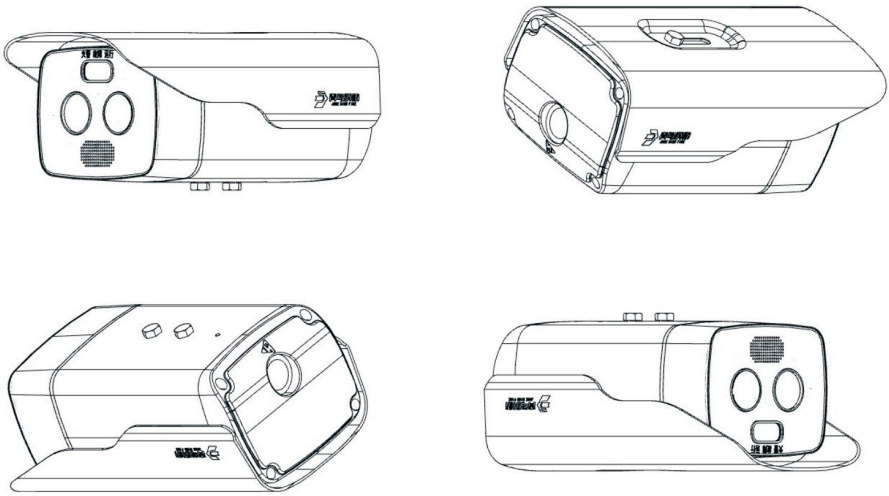
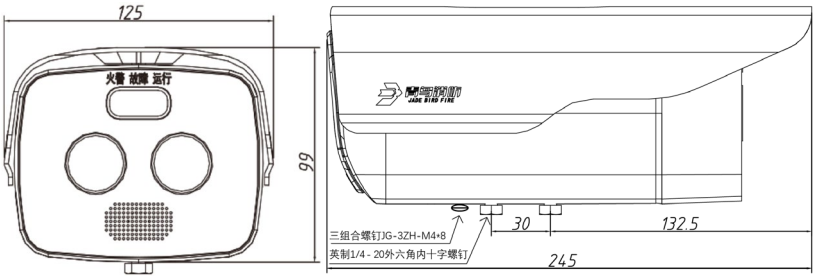


图 1-1



单位 mm

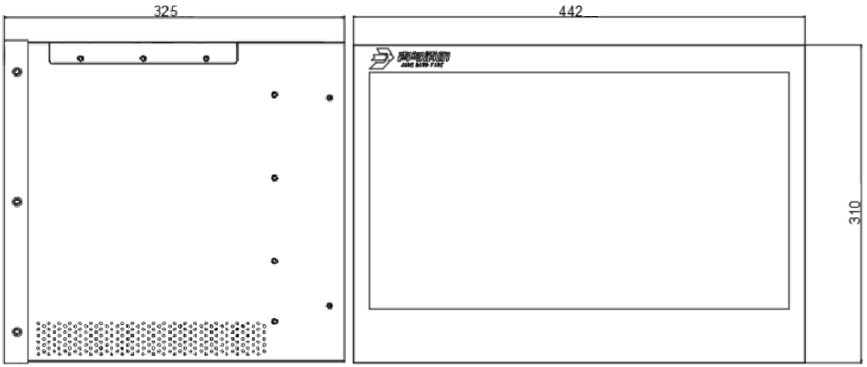
图 1-2

建议安装方式：

壁装：鸭嘴支架　　吊装：L型支架　　座装：中号万向节

图 1-3

2）图像型火灾探测器监控部分外形尺寸



单位 mm

图 1-4

1.5 执行标准

该图像型火灾探测器设计、制造和检定符合以下国家标准：

GB 15631-2008《特种火灾探测器》

1.6 兼容性

支持 JBF501x，11SF-C 全系列，51S01 系列控制器。

第二章 安装调试步骤

2.1 系统安装

探测部分安装过程

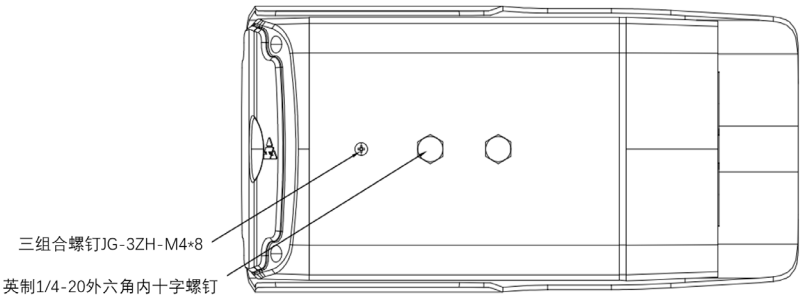


图 2-1

安装要符合当地相关标准或规范。

1) 选择一块可靠的墙壁，安装适用的支架，要求保证对监控区域无遮挡。

2) 将图像型火灾探测器探测部分固定在支架上。

3) 连接图像型火灾探测器探测部分的光纤、电源线和地线。

4) 通电开机后，根据图像型火灾探测器探测部分输出的视频情况调节摄像头角度，保证监控区域位于摄像头视角中央，并进行地面坐标标定。

5) 拧紧螺钉，使图像型火灾探测器探测部分可靠固定。

2.2 接线说明

1) 探测部分接线端子

端子名称	接线说明
24V+	电源正极（额定 24V）
24V-	电源负极
SC/RJ45	网络接口
PE	地线
IO （COM 为公共端，K 为常开端，B 为常闭端）	1. 红色：ALM-1-K，2. 黑色：ALM-1-COM，3. 黄色：ALM-1-B 4. 白色：ALM-2-B，5. 绿色：ALM-2-COM，6. 橘黄：ALM-2-K 7. 蓝色：ALM-3-B，8. 棕色：ALM-3-COM，9. 紫色：ALM-3-K

注意：图像型火灾探测器探测部分直流供电需使用传输设备箱内置电源供电，不得与其他用电负载混接，否则将导致设备损坏。

2）监控部分接线端子

端子名称	接线说明
CANH	外 CAN 信号 H
CANL	外 CAN 信号 L
L	火线
N	零线
PE	地线
RJ45	网络接口

3）系统接线

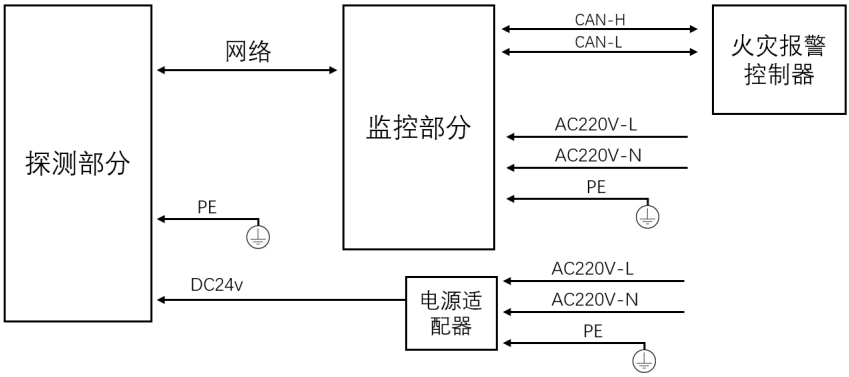


图 2-2

2.3 安装注意事项

1） 需满足 GB50395-2007《视频安防监控系统工程设计规范》9 条系统安全性、可靠性、电磁兼容性、环境适应性等要求。

2） 需满足 GB50348-2018《安全防范工程技术规范》的基本规定即 6.11 防雷与接地设计的要求。

3） 需要满足 GB50343《建筑物电子信息系统防雷技术规范》的要求。

2.4 声光指示说明

1) 图像型火灾探测器探测部分面板上的三个状态灯，分别为火警（红色）、故障（黄色）、运行（绿色），如果未探测到火警，并且未发生故障时，运行灯常亮；如果探测到火焰，则火警灯常亮；如果探测部分发生故障或通讯终端，故障灯常亮。

2) 图像型火灾探测器探测部分蜂鸣器发声有两种状态，分别为：火警音（0.5s 切换频率），故障音（2s 切换频率），两种状态声压级相同，蜂鸣器默认关闭，仅在开机自检阶段鸣响一声，如需报警音需要在监控部分设置界面手动打开。

3) 监控部分显示界面的探测器状态标识为三种颜色：红色闪烁背景（火警），黄色闪烁背景（故障），背景无闪烁（正常）；并有一个圆形指示点来标识连接状态，绿色为通信链路畅通，灰色闪烁为通信链路断开。在同时有火警和故障时，火警优先，为红色闪烁背景。

4) 图像型火灾探测器探测到火焰后，探测部分的火警指示灯亮，同时探测部分蜂鸣器输出火警声（若蜂鸣器已开启）；监控部分界面对应的探测部分红色背景闪烁，监控端输出火警声，并在报警列表显示当前“火警”事件，同时显示火点坐标；如果系统连接了火灾报警控制器或消防联动控制器，火灾报警控制器或消防联动控制器同时会报火警，并显示相应的报警信息。当火灾报警控制器或消防联动控制器发出消音指令时，火灾报警控制器或消防联动控制器报警声音停止，探测器探测部分也随之停止蜂鸣（若蜂鸣器已开启）；监控部分在现场状态恢复正常后，火警声消失，也可点击监控部分消音按钮对监控部分和探测部分进行消音。

5) 图像型火灾探测器故障时，探测部分故障指示灯常亮，同时探测部分蜂鸣器发出故障声（若蜂鸣器已开启）；监控部分界面对应的探测部分背景黄色闪烁，同时输出故障声，并在报警列表显示当前“故障”事件；如果系统联接了火灾报警控制器或消防联动控制器，火灾报警控制器或消防联动控制器报出故障事件，同时也发出故障声音。故障恢复时，探测部分故障指示灯灭，同时停止发出故障声（若蜂鸣器已开启）；监控部分对应的状态表现变为正常状态；火灾报警控制器恢复正常状态。

6) 图像型火灾探测器探测部分与监控部分出现通讯中断，监控部分界面对应探测部分状态转为离线，状态灯转为灰色，随后进入故障状态。

2.5 现场调试

1) 将图像型火灾探测器探测部分、监控部分和火灾报警控制器或消防联动控制器连接。设备在正常运行时必须良好接地。

注意：默认使用电口，接入光纤需先切换至光口再安装。

探测器转换通讯接口步骤：

① 保证探测器与监控部分正常连接，可正常通讯。

② 打开运维工具，选择图像型火灾探测器，选择当前设备，点击“网络”列左侧光电转换按钮，选择“光”，点击“保存”，显示“设置网络输出成功”后“ping”当前探测器 IP，通讯失败则转换成功，否则重复上述步骤直至成功。

③ 完成“电”-“光”通讯接口转换。

2) 图像型火灾探测器探测部分和监控部分通电后，探测部分启动完成后面板运行指示灯（绿）常亮；监控部分主机开机后监控界面启动，此时可点击左侧“搜索”按钮，稍等即可搜索出目前通过网络接通的探测器，点击“绑定”即可将当前探测部分和监控部分绑定在一起，图像型火灾探测器进入正常监视状态：探测部分面板运行指示灯常亮，监控部分无任何声响发出，监控部分界面状态闪烁灯为绿色，对应的图像型火灾探测器的现场状态和设备状态均显示正常，可以看到双光谱实时视频。

3) 若图像型火灾探测器探测部分和监控部分连接，监控部分界面打开后，探测部分面板故障灯常亮，蜂鸣器为故障音（若蜂鸣器已开启），监控部分界面一直未显示探测器状态，应检查光纤通讯线路。

4) 若图像型火灾探测器探测部分与监控部分和火灾报警控制器或消防联动控制器连接后，火灾报警控制器或消防联动控制器一直未显示对应的设备信息，需要检查监控部分和火灾报警控制器或消防联动控制器之间的 CAN 接口通讯是否正常。

5) 使用燃烧盘进行点火实验，图像型火灾探测器可正常报警，输出坐标与实际坐标误差在国标范围内（定位精度见设备铭牌），撤掉燃烧物后进行复位操作，探测部分运行指示灯常亮，监控部分探测器状态为绿色，视频正常监控状态，则系统调试完成。

第三章 保养与维护

1. 定期进行探测部分摄像头面板的清理，保证摄像头视野清晰，普通环境建议每三月进行一次探测部分面板除尘，灰尘较多的环境建议每月进行一次探测部分面板除尘。
2. 探测部分安装后，尽量避免撞击和强烈振动，如果发生视野角度变化，需要重新对探测部分摄像头角度进行定位调试。
3. 定期进行探测部分状态自检试验，点击“自检”按钮后三个状态指示灯会轮流亮灭并且蜂鸣器会“滴”一声，用于确认声光报警功能正常；可通过模拟报警功能验证探测器监控部分和报警控制器配接通讯是否正常。所有自检和模拟报警测试建议每半年进行一次。

第四章 故障分析与排除

图像型火灾探测器报故障有以下几种情况：

1. 视频信号丢失：图像型火灾探测器探测部分和监控部分之间通讯出现故障，需要检查图像型火灾探测器探测部分和监控部分之间的网络连接是否正常。
2. 遮挡：图像型火灾探测器探测部分摄像头视野被遮挡，需要检查探测器探测部分摄像头镜头是否有污损是否被遮挡，确保视野正常。
3. 连接线短路：图像型火灾探测器探测部分和监控部分之间通讯出现故障，需要检查探测部分和监控部分之间的网络连线。
4. 镜头发生偏转：图像型火灾探测器探测部分摄像头视场偏离监控区域，需要调整探测部分摄像头角度，保证探测部分摄像头视场对准监控区域。

第五章 注意事项与免责声明

1. 在使用中，必须严格按照本说明书的描述进行安装与调试。

   因以下情况造成损坏的产品，不享受免费保修服务：

   - 不可抗力、人为疏忽、使用不当、安装不当、接地不符合相关的建设标准造成的损坏。
   - 产品未经授权擅自拆卸改装。
   - 因运输过程造成的损坏（与货运方协商解决）。
   - 产品投入流通时的科学技术水平尚不能发现的材料或是设计、制造上的瑕疵。
2. 本公司保留对本说明书的最终解释权。

1 Introduction

Near infrared smoke and flame composite detector (Smart Jade Eye SF series), is a new type of distributed intelligent fire alarm detector launched by Jade Bird Fire Co., Ltd., with independent intellectual property rights.

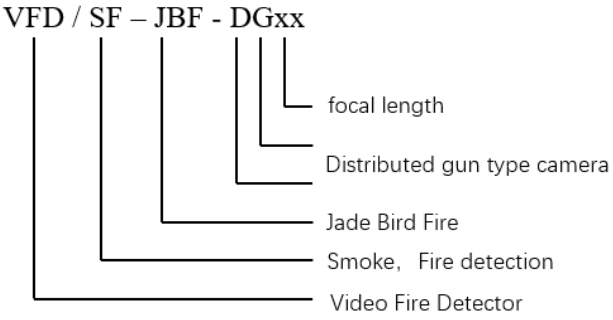
The product is equipped with a multi-core high-frequency processor with artificial intelligence acceleration capability, high-definition CMOS image sensor, and high-definition near-infrared sensor. It has higher ability to shield external interference, quickly perceive and detect small fire sources, and can quickly achieve fire warning and alarm. It supports dual light real-time imaging, alarm capture and recording functions, and can trace fire alarms throughout the cycle.

It is widely applicable to fire early warning in various large scenes and open environments, such as shopping malls, warehouses, hospitals, campus, museums, temples, banks, coal storage, waiting rooms, cinemas, stadiums, exhibition centers, ancient buildings, etc.

1.1 Features

1) Multi-dimensional composite detection: Combining AI algorithms and professional firefighting experience to achieve precise detection of smoke and flames in multiple dimensions.
2) High system adaptability: seamless integration of fire alarm system and security monitoring system, supports 3 sets of programmable relays.
3) High reliability: IP66 protection level, strong anti-interference ability.
4) Efficient linkage: A single detector supports 8 independent alarm linkage zones, each zone has an independent address.
5) Security Perception: Supports intrusion detection algorithms for dangerous areas and occupation of fire exits.

1.2 Product Model and Its Significance



1.3 Specifications

1) Detector

Part	Details	Specifications
IR imaging sensor	Sensor type	CMOS
	Lens	12mm fixed-focus
	Pixel	200 MP
	Resolution	1920×1080
	Lens aperture	F1.8
Visible light sensor	Sensor type	CMOS
	Lens	12mm fixed-focus
	Field of view	Horizontal 22°、Vertical 17°
	Pixel	200 MP
	Resolution	1920*1080
	Lens aperture	F1.8
Fire Detection	Distance	0.1 ㎡ heptane fire pan 5-200m[a]
	Recommend	120m
Video	Network protocol	RTSP，TCP，IPv4，FTP，NTP，UDP，DHCP，SDK，etc.

Part	Details	Specifications
	Video compression	H.264、H.265
Interface	Relays	3 Relays output NO/NC Cutoff power 30 V/2 A
	Ethernet interface	RJ45 (Max. 100m) or Single Mode SC fiber (Max. 25km)
	Reserved interface	RS-485
Environmental characteristics	Operation temperature	-20℃～+65℃
	Relative humidity	＜95% (No condensation)
	Stockage temperature	-30℃～+70℃
Visual indication	Run	Green light
	Fault	Yellow light
	Alarm	Red light
Electrical characteristics[b]	Voltage	Rated voltage: 24 VDC, operating range 12 to 32 VDC. Anti-reverse connection, overcurrent/overvoltage protection.
	Electricity consumption	≤5W
Mechanical characteristics	Size	245(L) * 125(W) * 99(H) mm
	Installation screw	Standard PTZ 1/4 inch screw * 2
	Material	Aluminum alloy
	Weight	1.8kg
	Protection level	IP66
	Installation method	Wall mounted, ceiling mounted
AI analysis	Detection type	Intrusion detection in hazardous areas Occupation of outdoor passages

[a] Lab ideal environment test data.

[b] This product is intended to be supplied by a Listed Power Unit, output rated 24Vdc, min 0.3A, , with LPS output, min 2000m attitude of operation and Tma=65 Deg.C

2) Monitoring end

Part	Details	Specifications
Power supply	Main power	AC187～242V, 50Hz
Dimensions and weight	Dimensions	442(L)*325(W)*310(H) mm
	Weight	10kg
Interface	Serial port	CAN bus interface *1
Environmental characteristics	Operating temperature	-10℃～+55℃
	Relative humidity	<95%(non-condensing)
	Storage temperature	-20℃～+65℃

1.4 Dimensions

1) Detector dimensions

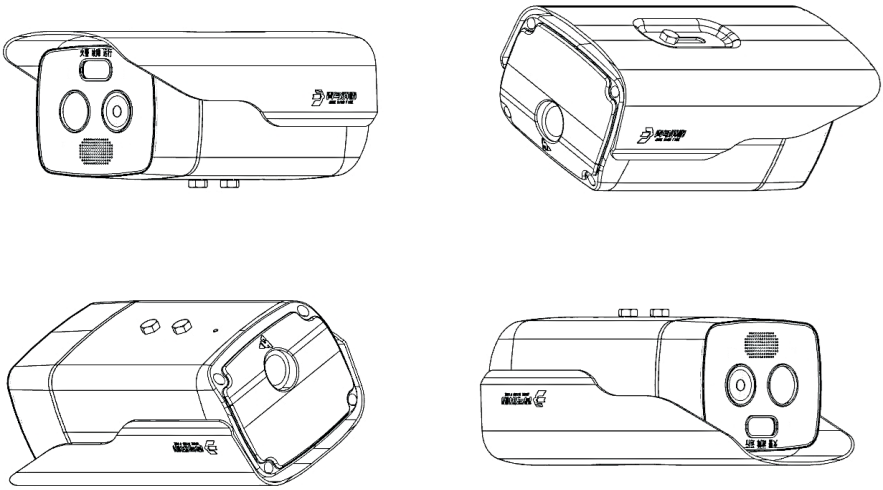
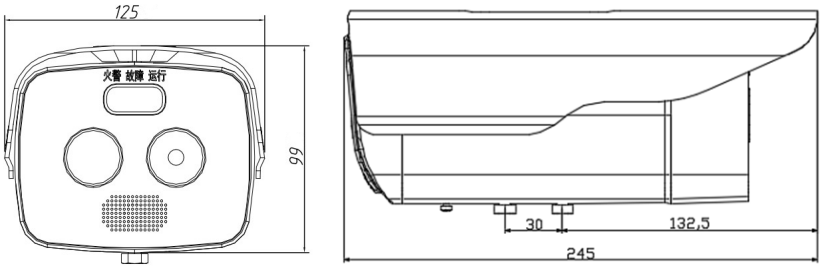


Figure1-1



Unit: mm

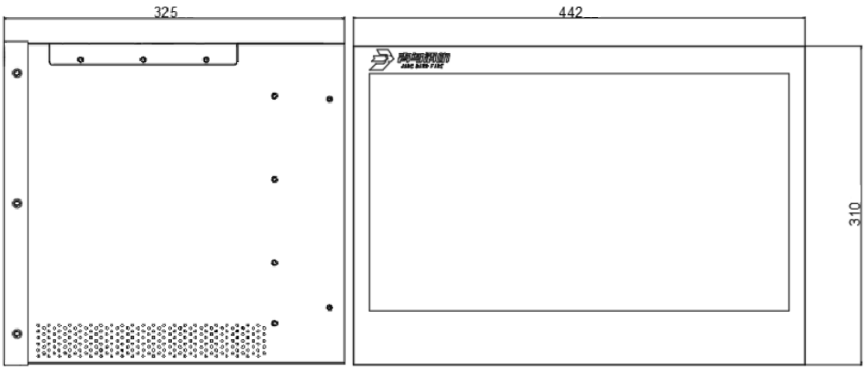
Figure1-2

Recommended installation methods:

Wall-mounted: Duckbill bracket　　Ceiling-mounted: L-type bracket　　Base-mounted: Medium universal joint

Figure1-3

2) Monitoring end dimensions



Unit: mm

Figure1-4

1.5 Standards

The design, manufacturing, and verification of this Video Fire Detector comply with the following national standards:

GB 15631-2008 "Special Type Fire Detectors"

1.6 Compatibility

Supports JBF501x, 11SF-C series, 51S01 series controllers from Jade Bird Fire.

2 Installation and Debugging Steps

2.1 System Installation

- **Detector Installation**

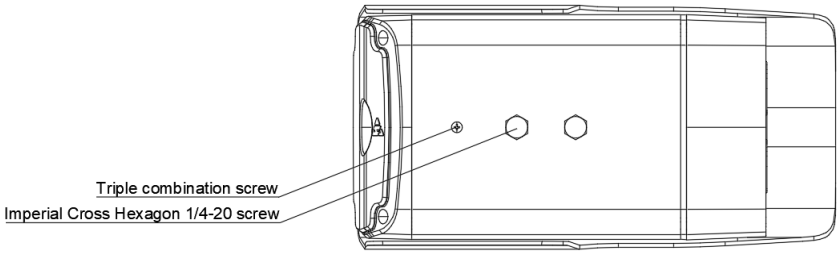


Figure2-1

Installation must comply with local standards or specifications.

1) Choose a wall, install an appropriate bracket, ensuring no obstructions in the monitoring area.

2) Fix the detector to the bracket.

3) Connect the detector's fiber, power supply, and ground wire.

4) After powering on, adjust the detector angle according to the video from the monitoring end to ensure the monitoring area is centered in the camera's view and perform ground coordinate calibration.

5) Tighten the screws to reliably secure the detection part.

2.2 Wiring Instructions

1) Detector terminals

Terminal	Wiring Instructions
24V+	Power positive (rated 24V)
24V-	Power negative
SC/RJ45	Network interface

PE	Ground
RS485	Light gray: RS485-A Light Blue: RS485-B
IO (COM- common, K - Normal Open, B – Normal Close)	1. Red: ALM-1-K 2. Black: ALM-1-COM 3. Yellow: ALM-1-B 4. White: ALM-2-B 5. Green: ALM-2-COM 6. Orange: ALM-2-K 7. Blue: ALM-3-B 8. Brown: ALM-3-COM 9. Purple: ALM-3-K

2) Monitoring end terminals

Terminal	Wiring Instructions
CANH	External CAN signal H
CANL	External CAN signal L
L	Live wire
N	Neutral wire
PE	Ground
SC/RJ45	Network interface

3) System wiring

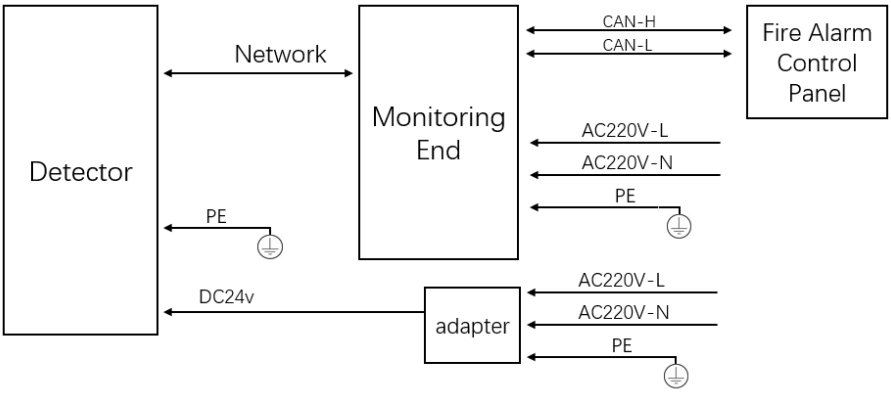


Figure2-2

2.3 Audio and Visual Indication Instructions

1) The three lights on the detector are fire alarm (red), fault (yellow), and

operation (green). If no fire alarm and no fault, the operation light is constantly on; if there is a flame alarm, the detector's operation light is constantly on, and the fire alarm light is constantly on; if the detector has a fault or communication with monitoring end interruption, the fault light is constantly on.

2) The detector buzzer has two states: fire alarm sound (0.5s switching frequency, short beeps) and fault sound (2s switching frequency, slow beeps), with the same sound pressure level for both states.
3) The detector status on monitoring end has three colors: red flashing background (fire alarm), yellow flashing background (fault), and no flashing background (normal); the circular indicator is used to indicate the connection status, green for communication link well, and gray flashing for communication link interruption. When there is both a fire alarm and a fault, fire alarm priority, indicator is a red flashing background.
4) When the detector detects flames, the fire alarm light is on, and the buzzer emits a fire alarm sound, the corresponding status on the monitoring end interface has a red background flashing, the monitoring end emits a fire alarm sound, and the current "Fire Alarm" event is displayed in the alarm list, also showing the fire point coordinates. If the system is connected to a fire alarm controller or a fire linkage controller, the fire alarm controller or fire linkage controller also reports a fire alarm, emits a fire alarm sound, and displays the fire alarm information. When the fire alarm controller or fire linkage controller perform a silence command, the fire alarm controller or fire linkage controller's alarm sound stops, the detector stops beeping (if the buzzer is turned on), and after the status returns to normal, the fire alarm sound on the monitoring end stops, or you can click the silence button on the monitoring part to silence both the monitoring and detector parts.

5) When the detector has a fault, the fault indicator light is constantly on, and the buzzer emits a fault sound; the corresponding detector's background on the monitoring part interface flashes yellow, simultaneously emitting a fault sound, and the current "Fault" event is displayed in the alarm list; if the system is connected to a fire alarm controller or a fire linkage controller, the fire alarm controller or fire linkage controller reports a fire alarm controller fault, and also emits a fault sound. When all faults are resolved, the detector's fault indicator light turns off, the fault sound stops, and the corresponding status light on the monitoring part changes to another color.
6) When the detector and the monitoring part communication interrupted, the corresponding detector status on the monitoring part interface changes to offline, the status light turns gray, and fault state.

2.4 On-site Debugging

1) Connect the detector, monitoring end, and the fire alarm controller or fire linkage controller. Devices must be well-grounded when operating normally.
2) Power on the detector and the monitoring part, after the detector starts up, the indicator light (green) is constantly on; after the monitoring part starts, the monitoring interface launches, click the "Search" button on the left, search for the currently network-connected detection parts, click "Bind" to bind the current detection part with the monitoring part, and the detector enters the normal monitoring state: the detector's operation indicator light is constantly on, the monitoring part emits no sound, the monitoring part interface's status flashing light is green, the corresponding detector's on-site status and device status are both displayed as normal, and real-time visible light and thermal imaging dual-spectrum videos can be viewed.
3) If the detector and the monitoring part are connected, and after the monitoring part interface opens, the detector's panel fault light is constantly

on, the buzzer emits a fault sound (if the buzzer is turned on), and the monitoring part interface does not display the detector status, check the fiber communication line.

4) If the detector is connected to the monitoring part and the fire alarm controller or the fire linkage controller, and the fire alarm controller or fire linkage controller does not display the corresponding device information, check whether the communication connection between the monitoring part and the fire alarm controller or fire linkage controller is normal.

5) Conduct a fire experiment using a burning plate, the detector can normally alarm, the fire coordinates are within the national standard range of error (see the device nameplate for positioning accuracy), after removing the burning material, perform a reset operation, the detector's operation indicator light (green light) is constantly on, the monitoring part's detection part status is green, the video can be normally monitored, then the system debugging is completed.

3 Maintenance

1 Regularly clean the camera panel of the detector to ensure a clear view of the camera. It is recommended to dust off the detector panel every three months in a normal environment, and monthly in a dusty environment.

2 After the detector is installed, avoid impact and strong vibration as much as possible. If the field of view angle changes, reposition and debug the detector angle.

3 Regularly conduct self-check for the detector status, press the "Self-Check" button, and the three status indicator lights will light up in turn and the buzzer will "beep" once, confirming that the audio and visual alarm functions are normal; the simulated alarm function can be used to verify whether the

communication between the monitoring part and the alarm controller is normal. All self-checks and simulated alarm tests are recommended to be conducted once every six months.

4 Fault Analysis and Troubleshooting

The detector reports faults in the following situations:

1. Video Signal Loss: There is a communication fault between the detector and the monitoring part, check whether the network connection is normal.
2. Masking: The camera view of the detector is masked, check whether the lens of detector is dirty or obstructed, ensuring the view is normal.
3. Connection Line Short Circuit: There is a communication fault between the detector and the monitoring part, check the network cable between the detector and the monitoring part.
4. Deflection: The camera field of view of the detector deviates from the monitoring area, adjust the camera angle of the detector to ensure the field of view aligns with the monitoring area.

5 Precautions and Disclaimer

1. During use, installation and debugging must be carried out strictly in accordance with the descriptions in this manual.
2. The standard referred to in this product is GB15631-2008, and all "national standards" mentioned in the text also refer to this standard.
3. All parts of this product (including the detector and monitoring end) have a precise and complex internal structure. Users are strictly prohibited from disassembling and altering on their own. The company is not responsible for product issues caused by unauthorized disassembly and alteration by users, and warranty services will not be provided.

4. The protection level test conditions of this product are obtained under normal environmental conditions, temperature: 15 ～ 35℃, relative humidity: 45% ～ 75%, atmospheric pressure: 86 ～ 106Kpa.
5. If the product is used at altitudes above 1500m, or in environments where extreme cold, extreme heat, rapid temperature changes, strong light, strong microwave radiation, electromagnetic radiation, ionizing radiation, high voltage electric fields, strong magnetic fields, etc., may occur, please judge according to the relevant indicators in GB15631-2008 or contact the company's technical personnel for confirmation. The company is not responsible for damages caused by improper environmental use.
6. All parts of the product must be properly installed according to the descriptions in the manual or the specific project construction requirements. If you are unsure whether the installation is proper, you can contact the company's technical personnel for confirmation. The company is not responsible for product damage caused by improper installation.
7. The free warranty scope of this product is limited to quality problems of the product itself. The company is not responsible for man-made damage caused by improper operation.
8. The warranty period of this product shall be subject to the terms of the specific sales contract.
9. The company reserves the right to final interpretation of this manual.

Battery Use Caution:

- When battery is used, avoid:
  - High or low extreme temperatures during use, storage and transportation;
  - Extremely low air pressure, or low air pressure at high altitude.

- Battery replacement.

- Use the battery properly. Improper use of the battery such as the following may cause risks of fire, explosion or leakage of flammable liquid or gas.
  - Replace battery with an incorrect type;
  - Dispose of battery into fire or a hot oven, or mechanically crushing or cutting of a battery.
- Dispose the used battery according to your local regulations or the battery manufacturer's instructions.
- **Personal safety warnings:**
  - Chemical Burin Hazard. This product contains a coin cell battery. Do not ingest battery. If the coin cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
  - Keep new and used batteries away from children.
  - If the battery compartment does not close securely, stop using the product and keep it away from children.
  - If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

Avertissement de l'utilisation de la batterie:

- Lorsque utiliser la batterie, évitez:
  - Températures extrêmement élevées ou basses pendant l'utilisation, le stockage et le transport;
  - Pression d'air extrêmement basse, ou pression d'air basse à haute altitude.
  - Remplacement de la batterie.
- Utilisez la batterie correctement. Mauvaise utilisation de la batterie comme celles mentionnées ici, peut entraîner des risques d'incendie, d'explosion ou

de fuite liquide de gaz inflammables.

- Remplacer la batterie par un type incorrect ;
- Disposer d'une batterie dans le feu ou un four chaud, écraser mécaniquement ou couper la batterie ;

- Disposer la batterie utilisée conformément à vos règlements locaux ou aux instructions du fabricant de la batterie.
- **Avertissements de sécurité personnelle :**
  - Risque de brûlure chimique. Ce produit contient une batterie de cellules. N'ingérer pas la betterie. Si la batterie de cellule est avalée, elle peut causer de graves brûlures internes en seulement 2 heures et peut entraîner la mort.
  - Gardez les batteries nouvelles ou utilisées à l' écart des enfants.
  - Si le compartiment de la batterie ne se ferme pas en toute sécurité, cessez d'utiliser le produit et gardez-le à l' écart des enfants.
  - Si vous pensez que des piles ont pu être avalées ou placées à l'intérieur d'une partie du corps, consultez inmmédiatement un médecin.

青鸟消防 JADE BIRD FIRE 智慧可视化 SMART VISUALIZATION

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