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e2系列JTY-GD-2412/24E型光电感烟火灾探测器
安装、维护及使用说明书

安装前

安装探测器之前，请仔细阅读本说明书，以便正确地使用和维护探测器。

电气参数

正常系统供电电压: 12/24 Volts ，无极性
最小: 8.5 Volts
最大: 35 Volts
最大纹波电压: 30% 峰峰值
最大静态电流: 50μA
最大报警电流: 20mA 12Volt 系统
报警触点容量: 0.5Amp @ 30 VAC/DC
报警复位时间: 0.3 sec
上电时间: 15 sec

机械参数

工作温度范围: GB: -10℃ to 55℃；**UL:0℃ to 49℃**
工作湿度范围: 10% to 95%RH, 无凝结
贮存温度范围: -20℃ to 70℃
直径 (含底座): 135mm
高度 (含底座): 51mm
重量: 179g
执行标准： GB4715-2005；UL268　　认证标志：

概述

JTY-GD-2412/24E型探测器是一种四线制光电感烟火灾探测器。它采用现代工艺技术的光电探测室并含有一个先进的微处理器。此处理器可在因探测室受污染严重而致使探测器灵敏度失调的情况下，会自动将探测器灵敏度调回出厂时的设置。为了确保探测器此功能正常运行，通电后，不允许打开探测室进行清洁、维护或更换探测室/防虫网。如有需要，必须在现场更换探测室/防虫网。

此类探测器是为开放式区域提供保护而设计的。

采用预先接入系统的底座，使探测器易于安装或拆卸。采用具有喇叭头自钻功能的紧固钉使底座的安装变得格外简单。

探测器上有一个发光二极管作为探测器现场的显示：

表1：探测器LED状态：

	红色 LED
上电	闪烁10秒
正常（静态）	不闪烁
超出灵敏度范围	闪烁5 秒
故障	闪烁10 秒
报警	点亮

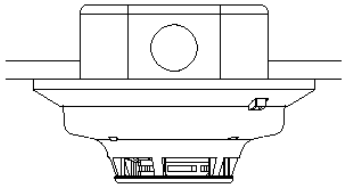
一个初始上电时间延迟后，红色LED将会每隔10秒闪烁一次。此时，大约需80秒的时间，探测器才完成上电循环。

安装

本类探测器与其配套底座可按以下方式安装：

1、 装入一个组合的预埋盒内，或
2、 装入89mm或100mm宽的八角形预埋盒内，或
3、 用一装饰圈接入100mm见方的预埋盒内，或
4、 直接安装或用专用工具将其固定在天花板上（见图2）。

图1、探测器安装示意图：

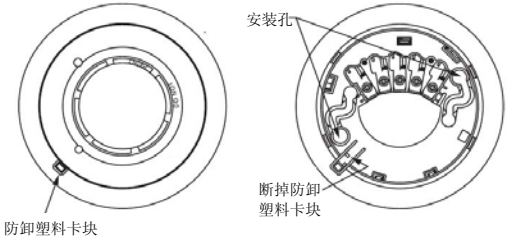


本型号探测器属四线制探测器，它只能与四线制底座配套使用。安装时，必须确保所用底座为四线制底座。

防卸功能

此探测器具有防卸功能，当启用此功能后，不用专用工具就无法从安装底座上卸下来。欲启用此功能，先将安装底座上（见图2 ）的防卸塑料卡块断掉，然后再安装探测器。一旦启用了防卸功能后，要卸下探测器时，可用一小螺丝刀伸进底座侧边的开口将塑料杆推动离开探测器卡槽后,逆时针旋转探测器将其卸下。

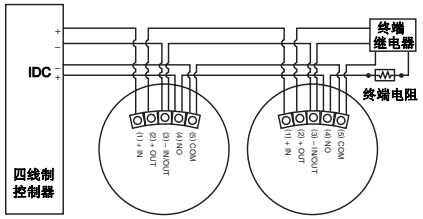
图2、防卸功能示意图：



勿将探测器安装在下列场所：

- 在或接近燃烧颗粒经常存在的地方，如：厨房、车库（废气排放）、火炉、热水器或加油器附近等；
- 太冷或太热的地方；
- 潮湿或湿度较大的地方，或靠近安装淋浴装置的浴室；
- 聚满灰尘、肮脏或昆虫滋生的地方；
- 接近空气流通或排风畅通的地方。因为空调、加热器，风扇或气流通风口会驱散进入探测器的烟雾。

图3、布线图：



安装

警 告：安装探测器之前，应切断回路的电源。

1、按图3所示连接底座端子线；
2、将探测器放在底座上，并顺时针旋转直至听到“喀嚓”声使其就位；
3、待所有探测器安装完后，向控制器供电；
4、按**测试**一节对探测器进行测试；
5、在控制器系统上使探测器复位；
6、通知相关部门系统进入工作状态。

注意： 防尘罩可用来限制灰尘进入探测器。但在建筑施工及装修期间仅用防尘罩保护是不够的，应卸下探测器。系统未使用期间所有探测器必须始终盖上防尘罩。而系统工作时必须摘掉防尘罩。请保留防尘罩以备后用。

测试

探测器在安装或维护清洁后，必须进行测试。

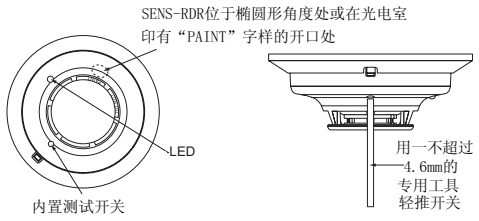
注意： 在测试之前，通告有关管理部门感烟探测器系统将进行维护，因此而临时停止工作。切断将进行维护的区域或系统的逻辑控制功能，以免造成不必要的报警联动。

确保探测器接线正确且已向系统供电。供电后允许等80秒探测器工作稳定后再按以下方法进行测试：

A. 内置测试开关

1. 测试开关在探测器外壳上的开口凹陷处（见图4）；
2. 用一小螺丝刀或通用板手压下内置的测试开关并保持住；
3. 如果探测器灵敏度在正常范围内，其上的LED将在5秒内恒亮。

图4、内置测试开关位置及SENS-RDR位置示意图：



B. 进烟测试

拿一阴燃的木棍或棉芯在探测器的侧面，将烟雾吹入探测器，直至报警。

警告：由于以上测试，探测器只有在电源被瞬时断电后，探测器才可进行复位。

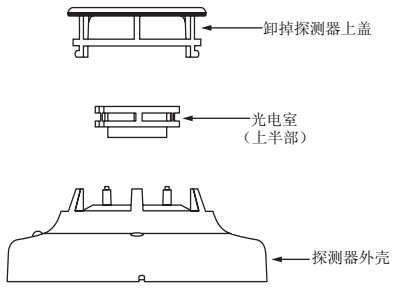
如果探测器未通过以上测试，检查接线是否正确并按**维护保养**一节清洗探测器。如果探测器仍未通过测试，则需要返回更换。通知有关部门系统恢复正常。

维护保养

在维护之前，通告有关管理部门感烟探测器系统将进行维护，因此而临时停止工作。切断将进行维护的区域或系统的逻辑控制功能，以免造成不必要的报警联动。

1、 逆时针旋转，卸下探测器上盖（见图5）；
2、用吸尘器清理外壳的灰尘杂质；
3、拧开光电室并在其一半的位置处举起（见图5）；
4、用吸尘器清理探测室两面的灰尘杂质；
5、清洁完后，将光电室顶部的箭头对准探测器上盖的箭头，压下直至其就位；
6、将探测器上盖放在探测室上，顺时针旋转直至锁定就位。
7、将探测器重新装好，然后进行测试（参考本文**测试**部分）。
8、通知有关部门系统恢复正常。

图5、探测器拆卸/安装示意图：



警告：本感烟探测器不能与防护装置配套使用，除非这种配套已经经过评估且证明适用于防护目的，方可使用。

标签日期码构成说明

产品的日期码由四位数组成：第一位表示生产年份的末位数字；第二位和第三位表示生产的月份；第四位表示当月第几周。

X	X X	X
表示：“生产年的末位数”	“生产月份”	“当月第几周”

质 量 保 证

西安盛赛尔公司对所生产的探测器产品实行三年保修。如果是由于人为损坏、使用不当或自行调整改动产品而导致失效的产品，不属于本保修范围，而因此造成的后果西安盛赛尔公司将不负责任。

FCC 声明

此产品符合FCC第15条例，仅在以下两种条件下运行：

（1） 此设备不能引起有害性干扰。
（2） 此设备必须具有排除外界带来的任何干扰功能，包括有可能导致其不能正常运行的干扰。

注意：

此设备经检测证明符合CLASS B 数字设备限制要求，遵循FCC第15条例规定。这些规定是为居民安装区防止有害干扰提供合理、及时的保护措施而设计的，此设备能辐射出有害元素，若安装或使用不当都会引起对无线电通讯设备的有害干扰，但也不可能保证在每个安装区都可起到保护作用，如果此设备确实对无线或有线接收器进行有害干扰，应关掉设备，用户尽量采取以下一种或多种方法排除干扰：

重新转换或安置接收天线；
加大设备与接收器间距离；
将设备接入不同于连接接收器的电路插座上；

INSTALLATION AND MAINTENANCE INSTRUCTIONS
e2 Series
Model JTY-GD-2412/24E
Photoelectric Smoke Detector

SYSTEM SENSOR
28 Tuan Jie South Road, Xi'an National
Hi-tech Industrial Development Zone
Province of Shaanxi, 710075, China
Telephone: (029) 85387800 Fax: (029) 88329259

Before Installing

Please thoroughly read the Xi'an System Sensor manual, Copies of this manual are available from Xi'an System Sensor.

Electrical Specifications

System Voltage-Norminal:	12/24 Volts Non-polarized
Min.:	8.5 Volts
Max.:	35 Volts
Max. Ripple Voltage:	30% peak to peak of applied voltage
Max. Standby Current:	50μA average
Max. Alarm Current:	20mA 12Volt Systems
Alarm Contact Ratings:	0.5Amp @ 30 VAC/DC
Alarm Reset Time:	0.3 sec
Start-up Time:	15 sec

Physical Specifications

Operating Temperature Range:	GB: -10℃ to 55℃; UL:0℃ to 49℃
Operating Humidity Range:	10% to 95%RH, non-condensing
Storage Temperature Range:	-20℃ to 70℃
Diameter (including base):	135mm
Height (including base):	51mm
Weight:	179g
Standard:	GB4715-2005; UL268
Certification:	

General Description

Model JTY-GD-2412/24E is a 4-wire photoelectric smoke detector. The model incorporates a state-of-the-art optical sensing chamber and an advanced microprocessor. The microprocessor allows the detector to automatically adjust its sensitivity back to the factory setting when it becomes more sensitive due to contaminants settling in its chamber. In order for this feature to work properly, the chamber must never be opened while power is applied to the smoke detector. This includes cleaning, maintenance or screen replacement. Should it become necessary, the screen/sensing chamber is field replaceable.

The JTY-GD-2412/24E detector is designed to provide open area protection.

Installation of the JTY-GD-2412/24E detectors is simplified by the use of a mounting base that may be pre-wired to the system, allowing the detector to be easily installed or removed. The mounting base installation is further simplified by the incorporation of features compatible with drywall fasteners.

A red LED on the detector provides a local visual indication of the detector's status:

Table 1: Detector LED Modes

	Red LED
Power-up	Blink 10 sec
Out of sensitivity	Blink 5 sec
Freeze Trouble	Blink 10 sec
Alarm	Solid

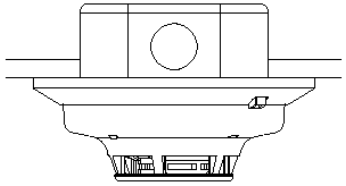
After an initial power-up delay, the red LED will blink synchronously once every ten seconds. It will take approximately 80 seconds for the detector to finish the power-up cycle.

Mounting

This model detector is supplied with a mounting base that can be mounted:

1. To a single gang box, or
2. To a 31/2-inch or 4-inch octagonal box, or
3. To a 4-inch square box with a plaster ring, or
4. Direct mount or to ceiling using drywall fasteners (Figure 2).

Figure 1: Mounting of Detector

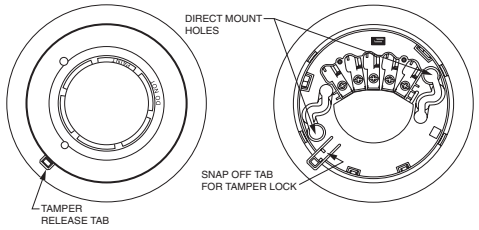


The JTY-GD-2412/24E heads and bases are keyed so that a 4-wire head will only mount to a 4-wire base. The heads and bases are clearly identified as 4-wire. When mounting the model, ensure that the head is mounted to the correct base.

Tamper-Resistant Feature

The model JTY-GD-2412/24E detector includes a tamper-resistant feature that prevents removal from the mounting base without the use of a tool. To engage the tamper-resistant feature, cut the small plastic tab located on the mounting base (Figure 2), and then install the detector. To remove the detector from the base once it has been made tamper resistant, use a small screwdriver to depress the square tamper release tab, located on the skirt of the mounting base, and turn the detector counterclockwise.

Figure 2: Tamper-Resistant Feature

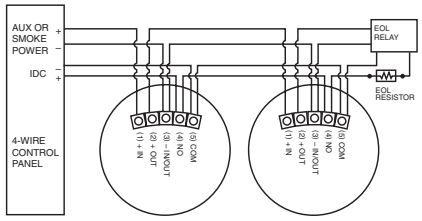


Do NOT Install Detectors in the Following Areas:

- In or near areas where particles of combustion are normally present such as kitchens; in garages (vehicle exhaust); near furnaces, hot water heaters, or gas space heaters.
- In very cold or very hot areas.
- In wet or excessively humid areas, or next to bathrooms with showers.
- In dusty, dirty, or insect-infested areas.
- Near fresh air inlets or returns or excessively drafty areas. Air conditioners, heaters, fans, and fresh air intakes and returns can drive smoke away from the detector.

CAUTION: Smoke detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

Figure 3: Wiring Diagram



Installation

CAUTION: Remove power from alarm control unit or initiating device circuits before installing detectors.

1. Wire the mounting base screw terminals per Figure 3 as applicable.
2. Place detector on the base and rotate clockwise. The detector will drop into the base and lock into place with a click".
3. After all detectors have been installed, apply power to the alarm control unit.
4. Test each detector as described in Testing.
5. Reset all the detectors at the alarm control unit.
6. Notify the proper authorities that the system is in operation.

CAUTION: Dust covers are an effective way to limit the entry of dust into the smoke detector sensing chamber. However, they may not completely prevent airborne dust particles from entering the detector. Therefore, System Sensor recommends the removal of detectors before beginning construction or other dust producing activity. When returning the system to service, be sure to remove the dust covers from any detectors that were left in place during construction.

Testing

Detectors must be tested after installation and following maintenance.

NOTE: Before testing, notify the proper authorities that maintenance is being performed and the system will be temporarily out of service. Disable the zone or system undergoing maintenance to prevent any unwanted alarms.

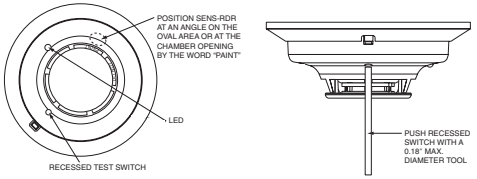
Ensure proper wiring and power is applied. After power up, allow 80 seconds for the detector to stabilize before testing.

Test model JTY-GD-2412/24E detector as follows:

A. Test Switch

1. An opening for the recessed test switch is located on the housing (See Figure 4).
2. Insert a small screwdriver or allen wrench (0.18. max.) into the test switch opening; push and hold.
3. If the detector is within the listed sensitivity limits, the detector's red LED should light within five seconds.

Figure 4: Recessed Test Switch Opening and SENS-RDR Position



B. Smoke Entry Test

Hold a smoldering punk stick or cotton wick at the side of the detector and gently blow the smoke through the detector until it alarms.

NOTE: For the above tests, the detector will reset only after the power source has been momentarily interrupted.

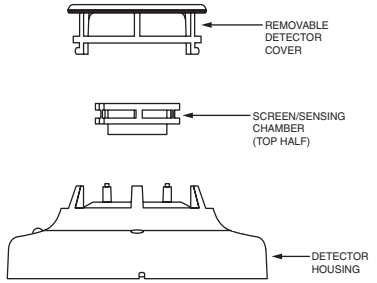
If a detector fails any of the above test methods, its wiring should be checked and it should be cleaned as outlined in the **Maintenance** section. If the detector still fails, it should be replaced. Notify the proper authorities when the system is back in service.

Maintenance

NOTE: Before performing maintenance on the detector, notify the proper authorities that maintenance is being performed and the system will be temporarily out of service. Disable the zone or system undergoing maintenance to prevent any unwanted alarms. Power must be removed from the detector before performing maintenance of any kind.

1. Remove the detector cover by turning counterclockwise. (See Figure 5.)
2. Vacuum the cover or use canned air to remove any dust or debris.
3. Remove the top half of the screen/sensing chamber by lifting straight up (Figure 5).
4. Vacuum or use canned air to remove any dust or particles that are present on both chamber halves.
5. Replace the top half of the screen/sensing chamber by aligning the arrow on the screen/sensing chamber with the arrow on the housing. Press down firmly until the screen/sensing chamber is fully seated.
6. Replace the detector cover by placing it over the screen/sensing chamber and turning it clockwise until it snaps into place.
7. Reinstall the detector and test. (See the Testing section.)
8. Notify the proper authorities when the system is back in service.

Figure 5: Removing/Replacing Screen/Sensing Chamber



Product Nameplate Date Code Note

X	X X	X
Stands for: The end number of the producing year	the producing month	the week of the month

Three-Year Limited Warranty

Xi'an System Sensor warrants its enclosed smoke detector to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. The company's obligation of this Warranty shall be limited to the repair or replacement of any part of the smoke detector which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture.

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
–Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.