Automatic fire alarm system is the main part of fire control system.

Automatic fire alarm system includes fire early warning system, fire detection alarm and linkage control system.

The linkage control system includes fire hydrant button, fire alarm, various input and output modules, fire appliance control device, fire broadcasting system, fire telephone system, graphic display device, emergency lighting, evacuation indicating system, etc.

Fire early warning system is an independent subsystem of automatic fire alarm system. It mainly includes combustible gas detection and alarm system and electrical fire monitoring system.
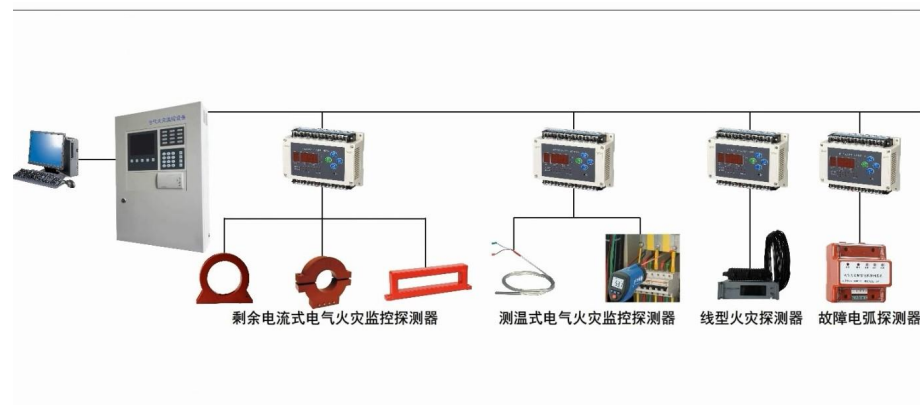
Combustible gas detection and alarm system is mainly used in the use, production of combustible gas or combustible steam places.

When the concentration of combustible gas in the protected area reaches the set value, the alarm is set.

The purpose of electrical fire monitoring system is to eliminate the fire hazard of electrical equipment.

When the residual current value of the detected power line or the temperature rise of the detected electrical components exceeds the safety value, an alarm will occur to prevent leakage, short circuit, overload and other situations.

The purpose of a fire warning system is to eliminate fire hazards.

剩余电流式电气火灾监控探测器　　测温式电气火灾监控探测器　　线型火灾探测器　　故障电弧探测器

When a fire occurs, the fire detection and alarm system and fire alarm linkage control system are required to operate.

Fire detection alarm and linkage control system is automatic fire fighting facilities, it carries out fire detection alarm, sends out control signals to all kinds of fire fighting equipment and receives feedback signals from the equipment, so as to achieve predetermined fire fighting function.

The fire detection alarm and linkage control system as shown in the figure is composed of fire detection alarm system and fire linkage control system.

In practical application, fire alarm controller and fire linkage controller are integrated products, which are called connected fire alarm controller.

Fire alarm linkage control system mainly includes fire detector, manual fire alarm button, fire hydrant button, fire alarm, various input and output modules, fire electrical control device, fire broadcasting system, fire telephone system, graphic display device.

Fire detector is a device that can respond to fire parameters and automatically generate fire alarm signal.

We often have smoke detectors, temperature detectors, photosensitive fire detectors, carbon monoxide fire detectors, picture-type fire detectors and so on.

Manual fire alarm button is a device that generates fire alarm signal manually.

The fire hydrant button is a manual alarm button set with the fire hydrant.

The automatic fire alarm system shall be equipped with fire audible and visual alarms, and all fire audible and visual alarms in the building shall be activated after the fire is confirmed.

The input module is used to receive the action status of the monitored device, and can wire the normally open or normally closed signals of the monitored device, such as water flow indicator and pressure switch.

The output module is used to control the start, stop or switch of some devices. It is generally used to control devices without signal feedback, such as audible and visual alarms and alarm bells.
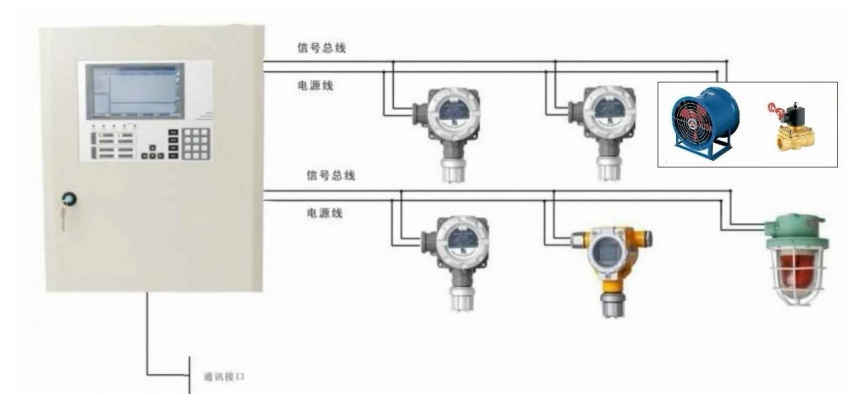
Input output module

Compared with the output module, the input and output module is equipped with signal feedback function. After starting the device, the input and output module can receive the feedback signal from the device. It is mainly used to control the equipment with signal feedback, such as smoke exhaust valve, air supply valve, fire valve, etc.

In the linkage control of fire alarm, automatic sprinkler system, hydrant system, foam extinguishing system, gas extinguishing system, smoke prevention and exhaust system, fire rolling curtain system, fire extinguishing system can be realized through all kinds of detectors, alarm buttons and modules.

Emergency lighting and evacuation indicating system, fire emergency broadcasting system and other fire facilities linkage control. With the multi-line linkage control panel, the linkage control of fire pump, smoke control and smoke exhaust fan and other starting cabinets can also be realized.

For some relatively complex control logic of the gas fire extinguishing system, fire door monitoring system, fire shutter system, emergency lighting and evacuation indication system, fire emergency broadcast system, fire telephone system, will also set up a separate control host to implement a specific function.

The gas fire extinguishing system is mainly used to protect some special important parts and computer equipment.

Fire door, fire window, fire shutter is used for building doors and Windows at the opening of the fire separation facilities.

Fire emergency lighting and evacuation indicating system refers to the system that provides lighting and evacuation indicating for personnel evacuation and fire fighting operations.

Fire emergency broadcasting system is an important equipment for fire evacuation and fire fighting command, which can effectively guide the evacuation of all parts of the building.

Fire telephone is a special equipment for fire communication, which can provide convenient and fast means of communication when fire occurs.

The graphic display device is installed in the fire control center, which can access the alarm information and fault information of the electrical fire monitor, fire door monitor, fire equipment power monitor, combustible gas detection alarm controller

Simulate the building plane layout of fire trigger device and linkage device on site, which can truthfully reflect the fire, linkage and fault situation on site.

The power monitoring system of fire fighting equipment monitors the power supply of fire fighting equipment in real time, and detects the working status of the power supply, such as current and voltage.

When the power supply over-voltage, under-voltage, over-current, lack of phase circuit fault, it sends out an alarm signal.

The power monitoring system of fire fighting equipment is mainly used to monitor the working state of the power supply of fire fighting equipment, and has no direct correlation with the automatic fire alarm system.

二线制火灾自动报警系统