

Please read this Manual carefully before installing and using the product .

# KZJ-A55E IO Module

## 1 Product overview

**1.1** KZJ-A55E IO module (after this referred to as the KZJ-A55E module) is used with the fire protection linkage controller. It adopts non-polar two-bus power supply, low power consumption design, without additional 24V power supply, mainly for active output control of fire linkage equipment (such as smoke exhaust valve, air supply valve, 24V strong shunt excitation trip and other DC24V active pulse instantaneous control equipment), and can receive passive feedback signals from linkage equipment to judge whether the linkage equipment is working normally.

#### 2 Technical parameters

2.1	Items	Parameters		
	Executive standard	GB 16806-2006		
	Operating voltage	Loop 24V		
	Wire system	Non-polar two bus		
	Working current	Static current: < 1mA; Operating current: < 28mA		
	Output capacity	DC34V/1.5A/25ms or DC24V/18mA		
	Output mode	Active pulse output or active constant output		
	Input mode	Input normally open check line, input normally closed check line		
	End of line resistor	47kΩ resistor		
	weight	About 103g (including base)		
	External dimensions	86×86×40(mm)(including base)		
	Operating environment	Temperature: -10°C ~ 55°C; Relative humidity: ≤95% (40°C±2°C no condensation)		
	Coding mode	Electronic coding, occupies 1 address, can be set anywhere between 1 and 324		
	Work instruction	The output indicator lights up every 12 seconds when in the inspection state ,the output		
		indicator lights up when in the pulse output state , and the output indicator lights up when		
		in the constant output state . The input indicator is steady on when the feedback status is		
		given		

#### **3** Appearance and dimensions

3.1



Figure 1 Main body of KZJ-A55E module (unit: mm)



**4.1** Installation base (DZ-A55) diagram





11.12	Controller loop bus signal access terminal		
	(non-polar connection)		
ТО+、ТО-	Passive feedback input		
OUT+、OUT-	Active output terminal		

Figure 2 KZJ-A55E module base (DZ-A55)

## **4.2** Coding wiring instructions:

**Module address coding:** Clamp the output end of the encoder to the rear cover L1 and L2 (regardless of polarity) as shown in Figure 1, adjust the encoder to the encoding function, and press the "Run" key to complete the address encoding after entering the correct address number; (Note: The encoder will emit a "drop" sound when the encoding is complete, please refer to the encoder manual for detailed operation).

**Module working mode setting:** The working mode of the module can be set through the encoder according to different application scenarios on site. When setting the working mode, the upper output end of the encoder should be clipped to the L1 and L2 pins of the rear cover (regardless of polarity), and then the encoder should be switched to the module function mode setting, input the corresponding working mode code is in the following table, and press "Run" to set the mode.

Output Patterns	Input mode	Mode Code	Applied load resistance	
	Input normally open line	01	Add one $47k\Omega$ resistor to each input and	
	Standard mode	01	output end	
	Input normally closed check line	02	Add one $47k\Omega$ resistor to each input and	
Pulse Output	Standard mode	02	output end	
	Input normally open check line	03(Factory	ctory	
	(production test mode)	default)		
	Input normally closed test line	0.4	Add a 47k $\Omega$ resistor to the input end	
	(production test mode)	04		
	Input normally open line	11	Add one $47k\Omega$ resistor to each input and	
	Standard mode	11	output end	
	Input normally closed check line	10	Add one $47k\Omega$ resistor to each input and	
Constant	Standard mode	12	output end	
Output	Input normally open check line	10	None	
	(production test mode)	15		
	Input normally closed test line	14	Add a 47k $\Omega$ resistor to the input	
	(production test mode)	14		

**4.3** Function connection: If the input terminal is set to "normally open input", and the end of the module input line (away from the module end) must be connected to a  $47k\Omega$  terminating resistor. If the input terminal is set to "normally closed

input", the end of the module input line (away from the module end) must be connected to a  $47k\Omega$  end of line resistor; The end of the module output line (away from the module end) must be correctly connected to the  $47k\Omega$  end of line resistor, and the module can identify the short break fault of the line in the load loop. At the same time, the OUT+ and OUToutput ends should be connected in series with a 1N4007 diode and then connected to the controlled device, the wiring method is shown in Figure 3.





- 5 Product installation and commissioning (A Warning: The module must not be installed in the power distribution (control) cabinet (box).
- **5.1** Confirm that the module type matches the type indicated on the construction drawing, and complete the address code and working mode setting;
- **5.2** Fix the base of the module and connect the cables correctly according to Figure 3. Insert the module body into the module base, and ensure that the two are in good contact;
- **5.3** When the installation is complete and all information has been confirmed, power on the fire linkage controller. After the automatic login is successful, the module inspection indicator blinks every 12 seconds.

### 6 Matters needing attention \Lambda

- **6.1** This module provides an active output to control the system below DC36V. In constant output mode, the output voltage fluctuates with the bus voltage. When in use, confirm that the input voltage of the module bus meets the rated operating voltage of the device.
- 6.2 Do not connect terminals OUT+ and OUT- terminals to the DC24V power supply; otherwise, the device may be damaged.

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