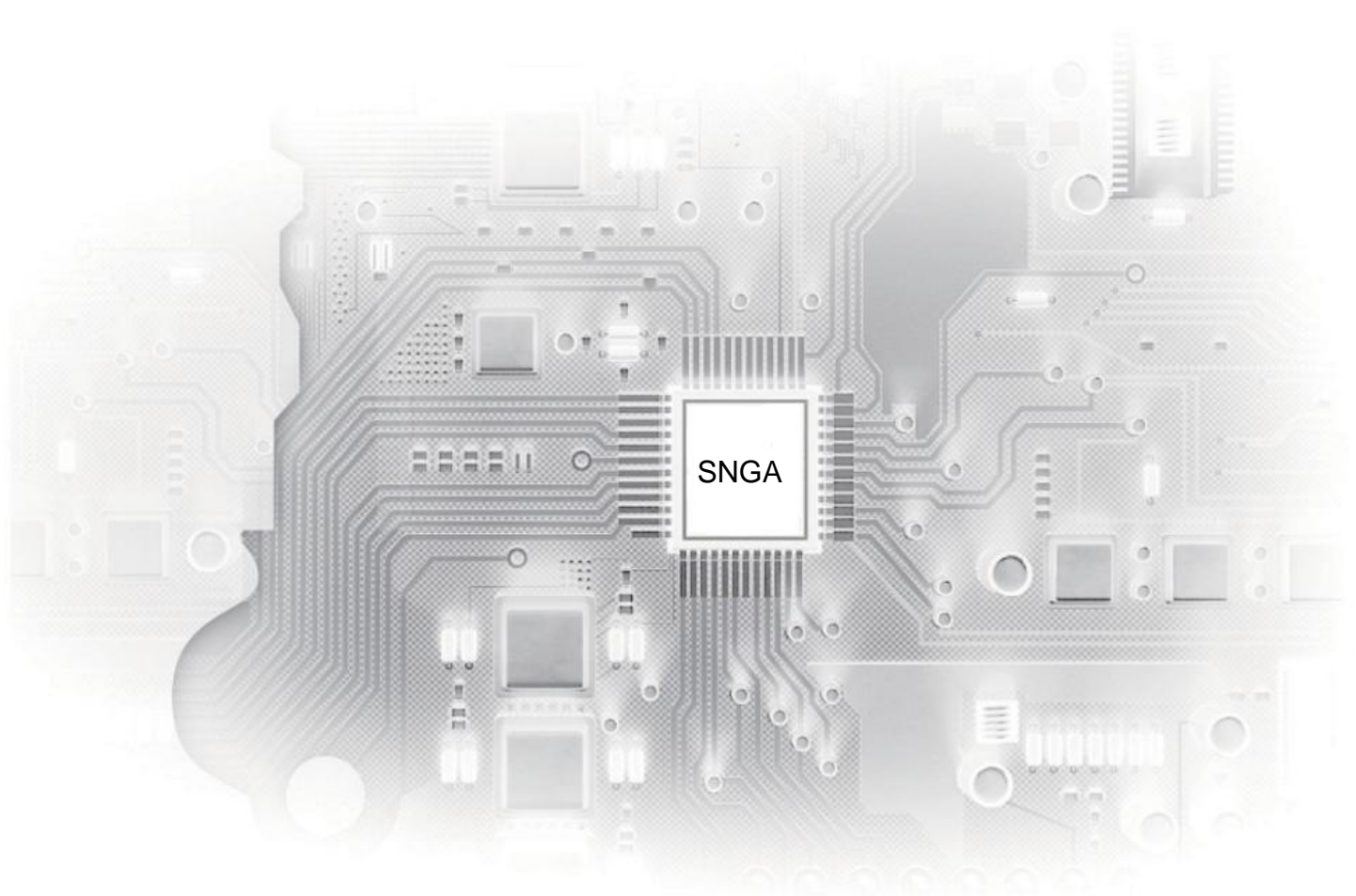


# SNGA-EPB110 Electric Release device manual



Zhejiang Shenjia Elevator Technology Co., LTD

Tel : 400-657-5775

Technical guidance: 19957783267

19957783269

Sales cas: 110577-62166788

Fax : 0577-62562878

Address: 8 Yongxing 2nd Road, Chengdong Industrial  
Park, Leqing Ci ty, Zhej i ang Province, Chi na

URL :<http://www.snga.hk.com>

Please pay attention  
to the official account The right of final explanation belongs  
to Shenjia Elevator Technology

# SNGA Series electric release device operation manual



## Warning

In order to prevent the loose brake device from being burned by external electric shock, the following two points must be done during startup and debugging:

- 1, the elevator must be disconnected from the main power supply before starting.
2. After debugging, the elevator can only be powered off when the green running light goes out.

Input Voltage : 220VAC

Output Voltage : 110VDC/75VDC

Output Power : 400W

## Usage:

1. Disconnect the main power supply of the elevator first.
2. Press the start button.
3. Wait a few seconds, when the blue light is off and the green light is blinking, press start and public at the same time Two buttons, when the red light is on, the power output, release the lock.
- 4, if the blue light, at this time the elevator in the door area position, press the public and forced two buttons, the red light on, power output.

## . Terminal interface

### 1: P1

P1-1-AC220 (L)

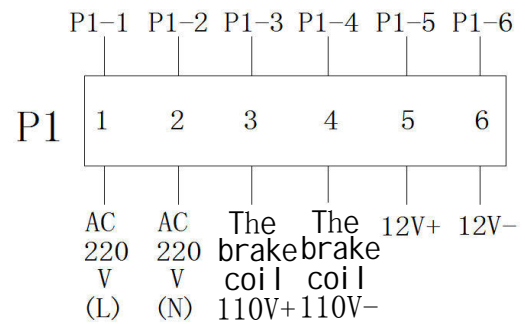
P1-2-AC220 (N)

P1-3-The brake coil+: 110V+

P1-4-The brake coil -: 110V-

P1-5: +12V

P1-6: -12V



### 2: P2

P2-1-Battery boost 24V+

P2-2-Battery boost 24V and (24VDC/1000mA)

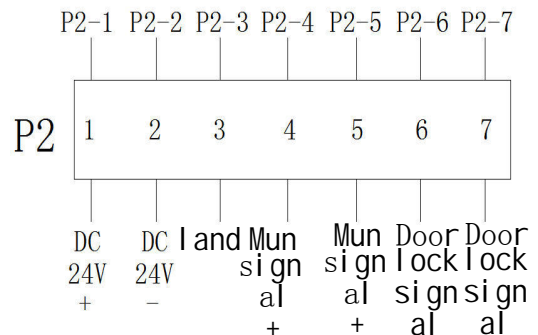
P2-3-Switching power supply ground wire

P2-4-Mun signal +

P2-5- Mun signal -

P2-6-Door lock signal (When the door lock signal is not connected, p2-6 ~ P2-7 should be short-circuit-connected)

P2-7-Door lock signal



### 3: P3

P3-1-start button (External use)

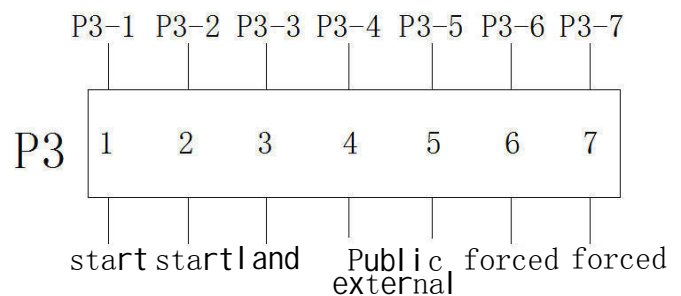
P3-2-start button (External use)

P3-4-Public button (External use)

P3-5-Public button (External use)

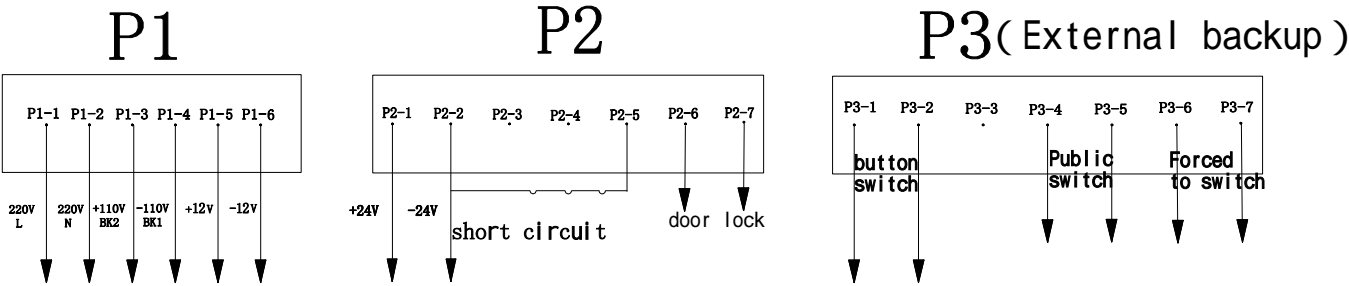
P3-6-Forced button (External use)

P3-7-Forced button (External use)



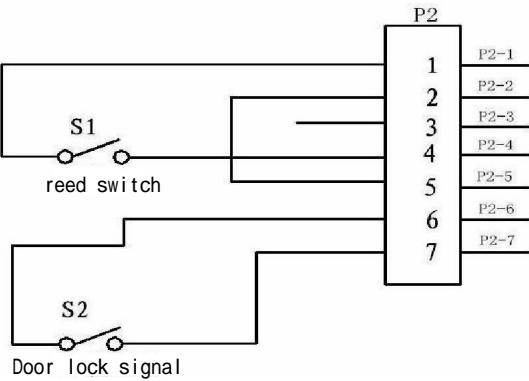
II. scott connection

1.Simple and easy way:

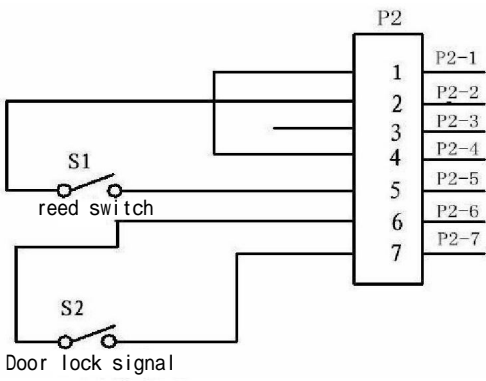


(Figure 1)

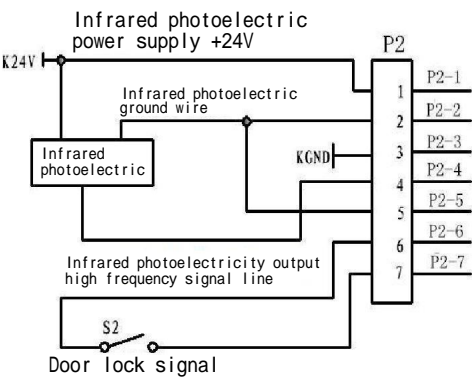
2. Wiring diagram of different control methods for P2:



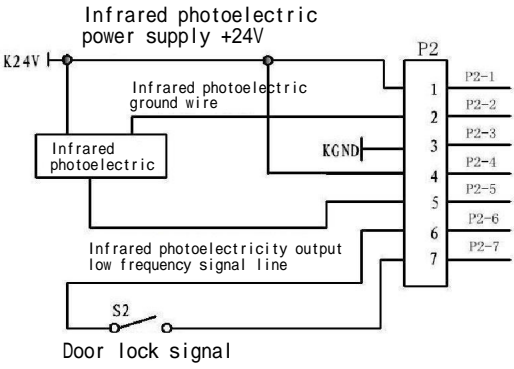
Door inductor is reed tube,  
high level effective  
(Figure 2)



Door inductor is reed tube,  
effective at low level  
(Figure 3)



Door area sensor is infrared  
photoelectric, high level has  
trigger. K24V- Switching power  
supply 24V+, KGND- Switching power  
supply 24V ground.  
(Figure 4)



Door area sensor is infrared  
photoelectric, low level has trigger.  
K24V- Switching power supply  
24V+, KGND- Switching power supply 24V  
ground.  
(Figure 5)

Note: If the infrared photoelectric output has two high and low lines,  
figure 4 is the access of high level output line, and Figure 5 is the access  
of low level output line.

## **.Definition of indicator light:**

Output indicator definition (left to right) :

The first blue light (door area indicator light) : when meeting the door area signal, this light will become bright, blue light. Conversely, transparent glass color LED.

Second red light (boost output indicator) : when boost output, this light will become bright, red. Otherwise, it goes out.

Third green light (operation and low voltage alarm indicator) : when the battery is not low voltage alarm, this light is green light, green LED flashing, when the voltage low voltage alarm, this green LED is steady on, not flashing.

Fourth yellow light (charge indicator) : when the battery is not full this light will flash, yellow light. When the battery is fully charged, the indicator is steady on, indicating that the battery is fully charged.

## **.Use method and working principle:**

1. When 220VAC exists, the loose brake power supply will not have boost voltage output, and the internal circuit is isolated from the external lock brake circuit. Pressing any button on the panel will not start the boost output, thus avoiding storage at 220VAC. At the same time, the output voltage of the boost voltage and the voltage after the rectifier of the mains are superimposed on the lock coil so that the lock line The coil or loose brake power supply may be damaged

2, start the use: disconnect the AC mains power supply, ensure that the peripheral wiring is correct, door lock signal is not charged, not grounded.

1). First press the "start button" to release the power supply and start the internal circuit. After 6 seconds, the green "running indicator light" will blink.

2). Press the "start button" and the "public button" at the same time (not in the gate area, if the single button is started, the public button is short-circuited), release the power supply to start the voltage boost circuit, and the green "running indicator light" will blink and "red" The color boost indicator "will light up. The release power supply outputs a 110VDC(220VDC) excitation voltage, and the lock coil is energized to open the lock and make the elevator move. After a delay of about 2 seconds, the release power supply outputs a reduced maintenance voltage (75V for 110V and 115V for 220V). This can save battery power consumption. Enable the output time to be longer.

3). The correct access to the flat signal, then start output, lock coil power, when the elevator moves to the door area, flat signal input to the loose gate power supply device, collect flat signal, "door area indicator light" Blue light, release brake device immediately automatically stop output, convenient rescue personnel in the door area to open the car door, so that trapped people out of the elevator. If the elevator door cannot be opened in this flat floor position or other reasons require the elevator to move to another nearest floor, press the "public button" and "forced button" at the same time. When the door area is located, the release brake device can continue to start the boost output, so that the lock coil is energized and the elevator moves. When in the door area position, the door area indicator light will emit blue light. Otherwise, it goes out. The "start button" does not work when the elevator is in the door position. The "force button" does not work when the elevator is in a non-door position. When leaving the door area, the output will stop and the "Start" button needs to be pressed Button and public button start output again.

4). The door lock signal is correctly connected. When the door lock is disconnected, the release power supply cannot start the boost output, the lock coil cannot get power, and the elevator cannot move. Boost output can only be activated when the door lock is closed. (If the door lock is broken, the elevator door is opened, and someone enters and exits the elevator, then someone in the machine room starts the boost output and the elevator moves, there will be great security risks. We learned this the hard way in the elevator accident. Access door lock detection signal is a technical highlight of this product. To use the forced output button of this product, please use ports 6 and 7 of the P3 terminal.

Note: during the debugging of this device, the main power supply should be disconnected, and p2-6 and P2-7 door lock signal can not be connected Electrical and grounding, otherwise the device will burn out when started.

5). The device will automatically stop output after running for up to 270 seconds each time after starting output. Can prevent the button adhesion, can not stop output. When triggered, if no button is pressed, the circuit will be automatically closed within 270 seconds, waiting for the next trigger.

6). Operation and low voltage alarm indicator: when the circuit works normally, the green indicator blinks. When the green indicator keeps on, it indicates that the battery voltage is too low or the machine is faulty.

3. After the release device is started, there is still working voltage. At this time, it should wait for all the indicators to be off before it can be connected to the power supply, otherwise it will damage the device

#### **. the charging**

1. When the elevator is not in normal use, the panel switch should be switched to OFF to ensure that the battery voltage will not be released externally;

2. When the elevator is in normal use, the panel switch should be kept in the ON position;

3. The device must be charged for 6-8 hours before it can be tested when it is put into use for the first time.

4. When the product is not used for a long time, it must be charged once within at least six months, and the continuous charging time is not more than 8 hours. After charging, it can be packed and stored.

#### **. Quality Guarantee period**

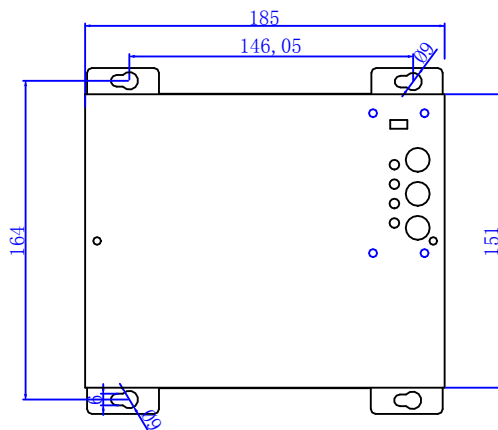
1. Product quality guarantee period: within 2 years from the date of product delivery

2, during the warranty period, due to the damage caused by the product itself, our company is responsible for the "three guarantees", namely "guaranteed repair", "guaranteed replacement" and "guaranteed return".

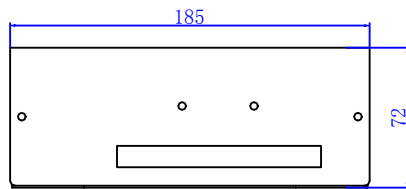
3. Warranty Period: If the product fails due to man-made reasons (not our personnel) or natural disasters, we will provide free maintenance service and only charge the cost of damaged or replaced parts.

4, after the warranty period: our company provides lifelong maintenance service, maintenance fees are charged according to the cost.

.The charging

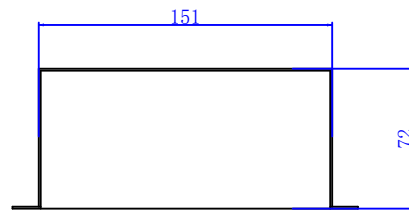


Top view of loose brake



Front elevation of pine sluice

Shen jia song gate three  
view installation



Elevation of loose sluice side

Revision instruction: October 21, 2021