EWD-H-XJ2 Induction Elevator Load Weighing Device Manual V2.2

● This system is applicable to all elevators with movable car platform in need of overload signals. This device is of extremely high performance-price ratio. This appliance is to overcome the inherent disadvantage of the mechanical overload switch and to replace it.

● **Main Property:**

1. Working in a contactless and inductive way. No mechanical movement itself. Being directly installed in the original place of overload switch. No necessity of changing the mechanism of elevator car.
2. Adopting strong inductive magnet, improving the anti-interference of the system to the utmost.
3. Rated relay dynamic open, overload relay -dynamic close and output-break are easy for customers to use.
4. The electrical property is in compliance with the standard of the International Electro-technical Commission (IEC).
5. More accurately positioning, small overall size, easy installation and adjustment, simple structure and low price.

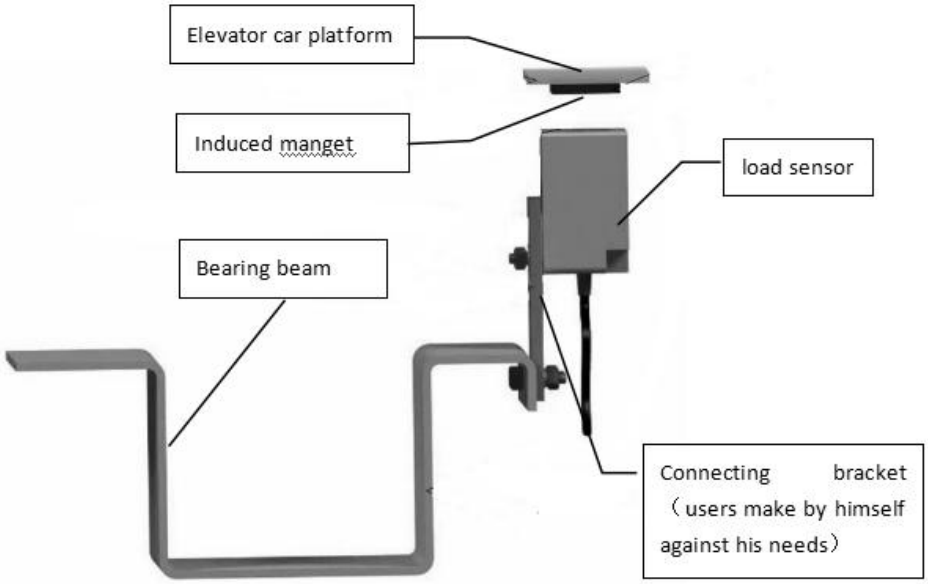
● **Technical Specification:**

1.	Application Range	Applicable to all elevators with movable car platform in need of overload signal with a inspection clearance of 7～11 ㎜.	
2	Sensitivity	Rated load / 200(5.0kg when rated load is 1 ton)	
3	System Error	≤1.5% (5～40℃)	
4	Output Mode	Full load	1 pair of relay dynamic **CLOSE** or dynamic **OPEN** contacts respectively with the capacity of DC/AC 48V/500mA.
		Over load	
5	Operation Ambient Temperature	-25～55℃	
6	Power Supply	AC/DC 24V(±10%)/15mA. The operating current of the whole machine≤100 mA.	
7	Install Position	Movable elevator car platform	
8	Overall Size	See figure 43X38.5X60.6mm^3	

● Working Principle:

This system weighs the elevator car load based on the principle of the elastic deformation of movable elevator car platform caused by loading with the HALL sensor measuring the change of displacement, fulfilling the aim of load weighing.

● Installing Method:



● Adjustment

1. Please refer to the above figure to install this device with the connecting support (made by the customer himself) closing the middle part of the car platform as near as possible.
2. Let the magnet adhesive on the car platform with the marking-face right facing the induction point of the device.
3. Install and adjust this device so that the magnet on the car platform aiming at the center point of its upper face. Meanwhile, assure the end face of this device in parallel with that of the magnet.
4. When the elevator is full load, adjust this device up and down to make the red and green flashing alternatively(if the green light flashing, please put this device close to the magnet; if the red light flashing, please make the device away from the magnet). When the red and green lights flashes alternatively, fasten the device; Then, press the down button once, the green light flash 6 times, full -load debugging finishes. When green lights on, it comes to a state of overload debugging.
5. Users put the weight in the car to the overload condition,then, press the down button once, the green light flash 6 times,overload debugging finishes, it comes to the normal working condition;
6. If it needs debugging, press the button on the device after power on, the red light flashing, when the green light flashes, release the button, the green light flashing after 4 times, it comes into the state of factory debugging.

● The principle of system wiring:

Wire		Function		Explanation
Red, black(gray)		System Operating Power		Operating Power AC/DC24V (±10%)/100mA
gray	black	Full load relay	Dyn. open contact	contact capacity：DC/AC 48V/ 500mA
purple	Orange	Overload realy	Dyn. open contact	

Attention : Output wire of this device must not be connected with external power supply to avoid everlasting damage.

Others:

Accessory: Inductive magnet [20×20×3mm^3] 1 piece Fastening Nut Φ4X20 : 2 sets
If there is any abnormality during adjustment or operation, contact our company directly.

Attention:

1. The inductive magnet is specially made of rare earth magnet with strong magnetism for this product. Take special care in the course of installation. Don't let it close to the high temperature above 100℃ to avoid demagnetization and our company will not be responsible for the personal hurt and equipment damage arising from this.
2. It is suitable for massive purchase.