

Elevator Card Reader

User Manual

This manual does not cover the entire contents of the function of elevator reader and non-contact smart card elevator controller system. Please refer to the actual product information. Future changes to the contents of the manual will no longer be individually informed of the user. Please read the entire manual carefully and follow the instructions.

Product model: ITL-DT/DT0200-2C

Last revision date: 26 July,2016

Chapter I Summary

1.1 Product Introduction

The Card reader is used to read information of ISO/IEC-14443A and other compatible contact-less RFID IC Cards, and sends the data to the elevator floor controller through the RS-485 communication after judgment of the basic authority, The elevator floor controller will deliver corresponding floor access authority through the judgement on the corresponding data.

1.2 Specifications

1. Power supply: DC 24V
2. PCBA Board Dimension: L96mm×W67mm×H19mm.
3. Installation hole size: L90mm×W58mm.
4. Capacitive touch keyboard 4cm×3cm , LED light, buzzer.
5. Usage Environment:
Temperature: -10~60℃;
Relative Humidity: Temperature (40±2) ℃ ,
Humidity 20%~93% non-condensing.
6. Storage Environment:
Temperature: -40~60℃;
Relative Humidity: Temperature (40±2) ℃ ,
Humidity 20%~96% non-condensing.

1.3 Product photos



Pic 1.1 Product Photo

JP1	Connected with access controller interface
SW1	Reader machine number and initialization DIP
JP_RD	Communication match jumper

Chapter II Installation and Debug

2.1 Jumper setting

2.1.1 JP_RD communication match Jumper

RS-485 communication matching jumper, when the reader is connected to the end of the communication bus, you must connect the jumper to prevent energy reflected in the communication line.

2.2 Internal interface instruction

2.2.1 JP1——connected with elevator floor controller reader port from up to down, the specific ports as below:

485B : RS-485 B port connected with 485B of controller's reader port;

485A : RS-485 A port connected with 485A of controller's reader port;

GRD: RS-485 ground port connected with GND of controller's reader port or not connected;

VIN: Positive power input connected with VPP of controller's reader port;

GND: Negative power input connected with GND of controller's reader port;

Note: If the Controller model is HLD-DT-A, the reader port is J11, specific reference controller description.

2.2.2 SW1——Reader machine number and initialization DIP

The DIP SW1.1 and SW1.2 are used to set the Reader number, if the elevator floor controller connected with two or more readers, The setting of SW1 of each device are different, specific setting described as below:

SW1.2	SW1.1	Definition
OFF	OFF	1 st reader
OFF	ON	2 nd Reader
ON	OFF	3 rd Reader
ON	ON	4 th Reader

SW1.3 is the initialization code of the reader: SW1.3 is set to ON, the reader starts to initialize, and then the reader is set to OFF to complete the initialization.

SW1.4: Standby Application

2.3 External Interface Instruction

5PIN ø20 Aviation female plug connect to the main controller, The aviation female plug is connected to JP1 in the reader circuit board via a five meter long RVVP6 *16 *0.15 cable. Aviation head interface is defined as:

- PIN1: 485B negative terminal of Reader RS485, connect 485B of reader JP1 through the blue line in the cable;
- PIN2: 485A positive terminal of reader RS-485, connect 485A of reader JP1 through the yellow line in the cable;
- PIN3:The ground terminal of the reader RS485 connected to the GRD of reader JP1 through the green line in the cable;
- PIN4:The power ground of reader connected to the GND of reader JP1 through the black line in the cable;
- PIN5:The power supply terminal of reader connected to the VIN of reader JP1 through the red line in the cable;

Note: If all wiring is ready from factory, you just connect the male connector of the connecting cable to the female connector of the reader.

Chapter III Instruction

After the connecting main controller to the reader, please power on the main controller and start initialization, downloading corresponding data and read the management card to make the device work normally.

3.1 Instruction of User card

User put the card into the sensing area of reader, the access controller will read and check the data of the card including card's password, validity, permission see if it is legal or not, the legal card will make a sound of "Di".

- After reading a valid single-level user card, the user card in the controller has the permission of a single floor control interface output action (A and C connected) 1 second, (B and C connected) 4 seconds, later on (A and C disconnected, B and C disconnected).
- After reading a valid multi-layer access card, the user card in the controller has multiple access control output actions on the floor (B and C connected, A and C disconnected) 4 seconds, later on (A and C disconnected, B and C disconnected) ;
- When read a reception card with uneven times, the authorized floor terminal B and C connected, When read a reception card with even times, the authorized floor terminal B and C disconnected.
- When read a VIP card with uneven times, the authorized floor terminal B and C connected, When read a VIP card with even times, the authorized floor terminal B and C disconnected.

3.2 The Use of Password

No need to read the user card, just input the password directly to get floor access (The card must be issued with password permission in the software management center, as to the authorized floor password settings. The password length is 4 digits.

Suppose the card number is 000001 and the access control is for 4 floors, the default password is 5555 as an example and operation steps as below:

1. Press the OK button;
2. Input the number 045555 or 45555;
3. Press the OK button;
4. Read card : 000001;
5. There is “Di” as hint;
6. The method of revising password is to follow the steps 1~4th mention above

Using password to take a lift:

1. Input the number 045555 or 45555;
2. Press the OK button, the system will record the entry and exit of the card, when the floor number and password are the same, it will save the first setting card number.

Chapter IV Regulatory

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

Caution:Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Warning: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.