

# Optical barrier QDIS320 & QDIS320S User Manual

(Version 3)





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#### Preface

Dear Users:

Thank you for purchasing our barrier which widely used to integrate with magnetic cards, barcode cards, ID or IC cards to manage the passages in hotel, factories, communities and enterprises, etc.

The barrier you purchased is strictly checked by QC.

Before using the barrier, please read this user guide carefully and put it in a safe place for future use.

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#### 1. Introduction

#### 1.1. Brief

The optical barriers developed, researched and produced by our company are used to manage passages by working with different kinds of readers and writers.

The housing comes out from stainless steels pressing which is good-looking, anti-rust and durable. It can be integrated with magnetic card, bar code, IC and ID card by standard electrical interface, thus good-order and civilized passing means are realized and unauthorized persons will never be allowed to get in. Meanwhile, to meet fire-control passage requirements, optical barrier arms will open automatically if power off and there will be enough time to organize people to get out.



1.2. Definition of each part



#### 2. Installation

- 2.1. How to fix the housing?
- A. Choose the fixing position according to model;
- B. Drilling 4 holes to fix 4 M12 expansion bolts;
- C. Fix the housing on the 4 expansion bolts (Notice: If photo cell is not on the same line, the system will alarm).

#### Installment Dimension (mm)





- 2.2. How to set the housing for multi-lanes?
  - A. Three Lanes







B. Two Lanes





Master

A.

0 0

C

÷.

2.3 How to connect Master machine with Slave machine?

The connection between master and slave



- 2.4. Connect Power and test.
- A. Connect power (notice: the barrier will close automatically when we connect it with power, so don't stand between barriers when we connect power.)



- B. Connect battery
- C. Test the barrier (press left open or right open, someone passes the barrier, barrier closes automatically.)



#### 3. Functions and features

- A. Barrier alarms automatically if someone passes illegally;
- B. If someone stands in the lane, the barrier doesn't open even the card reader gives relay signal to the barrier;
- C. Someone givers a signal in and the barrier is working. The barrier doesn't receive any signal out; D. Anti-trailing function;
- E. Keep open if the power is off (for safety);
- F. One-key open function (Press the key, barrier keeps open till press the key again);
- G. Detect fault automatically, Fault code:

#### Power On

E01 //system fault, Master cannot get Close relay signal;

E 51 //system fault, Slave cannot get Close relay signal;

#### Open

- E02; Master cannot get open relay signal;
- E52; Slave cannot get open relay signal;
- E82; both master and slave cannot get open relay signal;

#### Alarm

E99: Illegal passes.

H. Detect board Components automatically;

There are led lights to show components status, if the led light is on, component is ok.

If not, we should change the components;

I. System will alarm if photo cell of emitter and receiver is not on the same line. Notes: Don't push the barrier if you don't get the permission. (Guarantee doesn't include any artificial damage)



4. Wiring Diagram

#### A. Main board





B. Master control board



C. Slave Control Board





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#### **Menu Setting**

(All menus have been set in factory; please don't reset them if it is not needed)

- How to set? Following the steps:
- Press the button "SET", POO will be shown in the menu. Press button "INC" to go to interface P\*\*;
- Press SET, P\*\* will be shown in the menu;
- Press the button"Dec" back to P00;

Press the button "SET", and Press the button "Reset".

Finish the Job! (Check the main board wiring diagram for the those buttons)

**P00:** Exiting from the menu setting. When P00 is shown, press SET to exit from the menu setting.

**P01:** Motor turning direction when power on (Factory default is 000).

=000 means positive turning

=001 means negative turning

**P02:** The maximum time of barrier running, measurement is second. E.g., 3 mean 3 seconds, if the arm cannot close within 3 seconds, it will stop closing. (Factory default is 3).

**P03:** The maximum time for passenger pass, measurement is second. E.g., 10 mean 10 seconds, if passenger does not pass within 10 seconds after card is tapped, then

this card-tapping will be cancelled. (Factory default is 10)

P04: Working Mode (Factory default is 000)

=000: Bi-direction passing by card-reading (card-reading for directions)

=001: Left-passing by card-reading, right-passing freely (Left-passing means a person

faces the barrier, passing direction to his left-hand side; And vice versa.)

=002: Left-passing freely, right-passing by card-reading

=003: Bi-directions freely passing

**P05:** (master) Left open speed 15-31(the time costs from close position to left open

position), the number is bigger, the speed is faster (Factory default is 25)

**P06:** (master) Left close speed 15-31(the time costs from left open position to close position), the number is bigger, the speed is faster (Factory default is 25)

**P07:** Null

**P08:** Null

P09: Null

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**P10:** Zero clearing the access counter, when P10 is shown, Press the button "SET". "C-L" will be shown, then press the button"INC". Finish the job.

**P11:** Zero clearing the exit counter, when P11 is shown, Press the button "SET". "C-L" will be shown, then press the button"INC". Finish the job.

P12: Memory or not memory tapping cards information.

Memory: tapping several cards can pass several passengers.

Not memory: tapping several cards only store first card information. And only one passenger can pass. (Factory default is 000)

=000: Bi-direction with memory

=001: Left-passing without memory, right-passing with memory

=002: Left-passing with memory, right-passing without memory

=003: Bi-direction without memory

**P13:** Equipment address, namely No. \* machine. Range 1-31. (Factory default is 001)

P14: Equipment Type

=000: Use barrier by single

=002: Use barrier by pair

**P15:** Reset back to factory default. When P15 is shown, press the button "SET", and P-2 displayed. Now press the button "INC". Finish the job.

**P16:** Null

P17: Null

**P18:** (Slave) Left open speed 15-31(the time costs from close position to left open

position), the number is bigger, the speed is faster (Factory default is 25)

**P19:** (Slave) Left close speed 15-31(the time costs from left open position to close position), the number is bigger, the speed is faster (Factory default is 25) **P20:** Null

P21: Null



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