Tripod Turnstile
User Manual

1. Production Introduction

1.1 Specifications and Parameters

◇ Structure: Frame structure/stainless steel shell
◇ Production Process: CNC laser cutting machine production
◇ Barrier Length: 500mm
◇ Barrier Maximum Force: 60Kg
◇ Barrier Working Drive: 3KG

◇ Power voltage: AC100-240V±10%, 50/60HZ
◇ Working temperature: -25°C — +60°C
◇ Working Humidity: ≤90%. without condensation
◇ Access speed: 50 persons/min(normal open); 35 persons/min(normal closed)
◇ Mechanical Running Noise: ≤ 75dB
◇ Working Environment: Indoor and outdoor
◇ Input interface: switch signal, + DC12V level signal, DC12V pulse signal（pulse width ≥200ms）, 232 serial port signal
◇ Barrier Turn Mode: High precision digital positioning way

1.2 Features Introduction

Normal Open/Normal Close Features

Normal Open Status: Tripod Turnstile doesn’t lock when normal working. When received valid signal, it automatic turn 5 angles. During valid access time, it will turn automatic once someone touch barrier, Turnstile will be locked when invalid access.

Normal Close Status: Tripod Turnstile is locked when normal working, When received valid signal, It will unlock and automatic turn 5 angles. During valid access time, it will turn automatic once someone touch barrier

Counting Function
It can be counted access times, one valid access counted one time (add 1). Meanwhile, counter can be collected or cleared by software.

Valid Access Time Setup

Turnstile receives open signal, during valid access time, there is no one access. This access authority will be cancelled and does not count this as record.

Valid Open Barrier Signal

Record: When the position of dialer 3 is ON, read card N times, record N open times.

No-Record: When the position of dialer 3 is on digital X, continuously receive N times open signal and valid open signal, only keep the last valid signal, only 1 person can access.

Power off, barrier fall
Power on, barrier up by manually or automatically

When power off, barrier will fall, and the person can access freely. When power on, the barrier will automatically recover to setup status.

Under normal open status, force access alarm and reset function

If interloper push barrier turn to around 5 angles, turnstile will be locked 1s. If interloper push barrier turn to around 20 angles continuously, turnstile will be locked 2s and alarm. If don’t push barrier, it will automatically recover and alarm will be cancelled.
1.3 The Structure and Parts

- Air switch
- Tripod Turnstile Controller
- Power Input: AC100-240V
- Power:
  - Input: AC100-240V
  - 50/60hz
  - Output: DC24V/5A
2. Tripod Turnstile Controller

Power Input: DC24V power supply input port.

Limit Shift Switch: It will know any person access. If there is no this signal, controller will keep waiting (access time).

Anti-clockwise and clockwise access Input: After receive switch signal input, it will control clockwise output port or anti-clockwise output port.

Barrier feedback Input: The tripod shift one time (120°), it will output a low level signal. It is used in ticket system.

Anti-clockwise Output Port: Output DC 24V.
Clockwise Output Port: Output DC 24V.
Barrier-up Control: This port output 24V. Barrier will up by it control electromagnet.
Direction Indicator: It displays access direction.
**Port Instruction**

- **GND**: Power GND
- **24V**: 24V Power Input
- **ZERO**: Limit Shift Signal Wire
- **VCC**: Limit Shift Switch Power Wire
- **GND**: Limit Shift Switch GND
- **OP_L**: Anti-clockwise Open Signal
- **COM**: COM port (12V)
- **OP_R**: Clockwise Open Signal
- **PS**: Barrier feedback Signal
- **+24V**: 24V Power output
- **M0**: Anti-clockwise Output Port
- **M1**: Clockwise Output Port
- **R**: Direction indicator Light Data 1
- **G**: Direction indicator Light Data 2

**3. Connect with other devices**
4. Tripod Turnstile Functions

4.1 The Basic Function

1. With clear indication function, it can connect with direction light board to show access direction.
2. With anti-follow function: It can automatically cancel the access time after each person accessed to avoid following.
3. With a variety of work modes to chose, it can be one-way access, two-way access, control access by main board send switch signal (it should be connected with control system, access control, fingerprint etc…). All can set up by the menu of main board.
4. With auto reset function: After receiving opening signal, the system will automatically cancel the access if the passenger could not access in the given time. And the limited access time can be set in the menu of main board.
5. With the function of falling-bar when power off, It can satisfy the user's special request and fire safe request.
6. With both directional electro-magnet and position-limited switch working style (for high speed core of turnstiles), it can satisfy the different customer's requirements.

4.2 Function Instruction

1. There are six keypads on the main board. S4 and S5 is left open and right open separately. S1 is used to enter or exit from the menu. S2 and S3 is upturning and down, it is used for menu setup.
2. The LED of main board is 3 digits display from left to right side. Normal mode is 000.
3. After enter menu: To press menu button, it will display "P00". It is enter and exit button. S2 and S3 button can setup function number, there are 5 modes to setup.
   P00: Enter and Exit the menu
   1), Turnstile type P01:  1-0: Electro-magnet is active when powered on. (It fit for the tripod turnstile).  1-1, Direction electro-magnet will be failure when power off. (It fit for high speed turnstile). Default is 0.
2), Initialization P02: 2-0 is NO, 2-1 is Initialization

3), Access Time P03: 306 is the maximum access time(s), the default is 6s.

4), Working Mode P04: 4-0: anti-clockwise access and clockwise access need read card, 4-1: anti-clockwise access by card and clockwise access without card, 4-2: clockwise access by card and anti-clockwise access without card. Default is 0.

5), Testing Function P05: 5-0 is exit test, 5-1 is starts to test. Default is 0.

6), Anti-clockwise and clear P06, 6-0 is count or not count (0 is not count, 1 is count), 6=1 is check the access statistics, 6=2 is clear. Default is not count.

7), Clockwise access count and clear P07: 7=0 is count or not count (0 is not count, 1 is count), 6=1 is check the access statistics, 6=2 is clear. Default is not count.

8), Valid Access Record Function P08: 8-0 is no record, 8-1 is anti-clockwise access record, 8-2 is clockwise access record, 8-3 is anti-clockwise and clockwise record. Default is no record function.

9), Access Setup P09: 9-0 anti-clockwise and clockwise access, 9-1 is anti-clockwise access only, 9-2 is clockwise access only, 9-3 is clockwise access and anti-clockwise access are forbidden.

For example: If we setup max. access time is 10s for each person.

Step 1: Press Set button, it will display P00.

Step 2: Press S2 or S3 to find P03.

Step 3: Press set button, then it will display 306 (default is 6s).

Step 4: Press S2 or S3 to find 310 (it means the access time is 10s).

Step 5: Press set button, it will turn back P03.

Step 6: Press S2 or S3 to find P00.

Step 7: Press set button, it will turn back 000, then it will run normally.
5. Equipment Size and Installation

**ASP-T045L**

- Height: 990mm
- Width: 330mm
- Length: 420mm

**ASP-T045L2**

- Height: 990mm
- Width: 450mm
- Length: 450mm

**ASP-T060L**

- Height: 990mm
- Width: 280mm
- Length: 600mm

**ASP-T120L**

- Height: 990mm
- Width: 280mm
- Length: 1200mm
Fixing for equipment