DIGITALAS

Operating Instructions

Tripod Turnstile D-FORCE INOX ST 6000

Note: Before operating this unit, please read this instruction completely.

Thank you for choosing tripod turnstile; this is a product with high technology, so please read this manual carefully before operation. Please keep this manual for future reference.

Only trained professionals who understand electric and mechanical risk of product are qualified to install and operate gate system so as to avoid unnecessary dangers caused by misoperation.

All rights to improve and perfect our products are reserved. We can't promise this manual is in full accord with the product you receive, but we will check and revise the manual at regular interval. No further notification will be sent in the case of any modifications to the manual.

1·Product introduction

1.1 Function Features

(1) Standard signal input port, can be connected with most of the access control board, fingerprint device and scanner other equipment; **(2)** Automatic reset function, if people swipe the authorized card, but don't pass through within the settled time, it need to swipe card again for entry; **(3)** Card-reading Recording function **(4)** Automatic opening after emergency fire signal input **(5)** Anti following : prevent illegal passing **(6)** High light LED indicator , displaying passing status. **(7)** Normal open can be also controlled via external button or manual key unlock .**(8)** Arm will automatically fall down when power failure

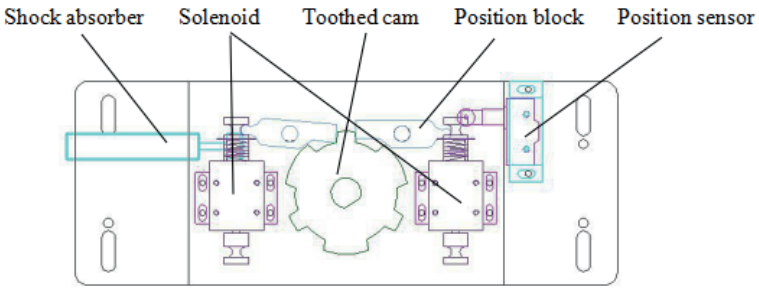
1.2 Technical parameter

Item	Description
House	304 stainless steel
Reliability of the core	3million, no fault
Weight	55Kg(bridge type)
Arm length	510(mm)
Max thrust capacity	60Kg
Driving force of arms	3Kg
Driving mode	digital
Direction of rotation	Unidirectional/ Bidirectional (controllable)
Indicator lamp	Green means passage
Power supply for core：	AC100~220V

Operational voltage	DC 24V ±5%
Voltage of indicator lamp：	DC12V ±5%(standard)
Power consumption	30W
Working environment	Indoors or outdoors(outdoor is optional)
Working temperature	-30℃～60℃
Humidity	5%～90%
Waterproof	≧IP31
Installation interfaces for card readers：	2
Control interface	relay signal input
Time needed for opening	0.2 seconds
Passing speed	30~45 persons/min

1.3 Product structure

The structure of the product is mainly composed of mechanical and electric control system.



Note: Configurethe mechanism type according to the product series and model…

The electric control system consists of access control device, control board, direction indicator, position sensor, SFsolenoid, damper,power supply.

NO	Name	Function
1	Access control device	IC/ID card access control, fingerprint, face recognition, code reader, access control device send delay signal to the turnstile board door signal（It is available according to actual use）
2	Control board	The control center of the system, when receiving the access control device delay signal, it control solenoid open ,the direction indicator light turns green, The arm can be pushed to 120 degree ,the solenoid will lock immediately when receiving closing signal from mechanism position sensor.
3	Indicator	Display the current channel status
4	Position sensor	Detects and controls the opening and closing position of the gate

5	Square solenoid	Control shatf close or open
6	Circular solenoid	Falling and upper arm
7	Damper	Makes the shaft run smoothly(match)
8	Power Supply	power supply to control board

2 Equipment Installations

2.1 Installation notes

(1) If it tests well before installation, then fixed it; before you install and maintain it, please cut off the power; **(2)** The product must be earthed, and an earth leakage breaker is necessary on the power supply; **(3)** The depth of buried PVC tube should be greater than 60mm, and the exposed height above the ground should be greater than 50mm. The exit mouth should be bending back to avoid water dipping inside the tube; **(4)** Don’ t change the inside wire of the turnstile casually; **(5)** In installation, please make each door of the lane are in alignment; **(6)** Tighten the mounting screws of the arm ;**(7)** If you use the turnstile outdoor, it need to add a canopy to protect the turnstile from sun and rain;

2.2 Equipment Installation

1) Tool preparations

1	A set of hexagon spanner	5	Screw driver and other common wiring tool
2	Cross screwdriver 6mm	6	Millimeter
3	Open spanner 17-19mm	7	M10x100 Expansion screws 8pcs
4	Impact drill D14	8	Cable Tester

2) Ensure the installation location and the system composition ,prepare to install after carrying out the system planning; **3)**Make well of installation of equipment foundation .**4)** Mark the fixing position of expansion bolts according to fixing plate on the bottom of each turnstile. **5)** Drill hole by impact drill, fix Expansion screws. **6)** Fix arm :Before delivery, we will dismantle three arm bar, so before using turnstileYou should assemble arm bar like following picture.

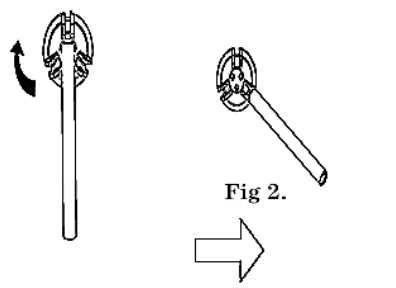


Fig1.Please rotato turnplate 120°

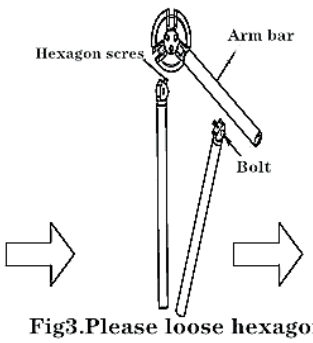


Fig3.Please loose hexagon socket cap screws

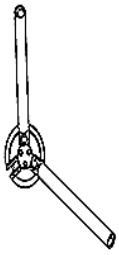


Fig4.Please insert arm bar

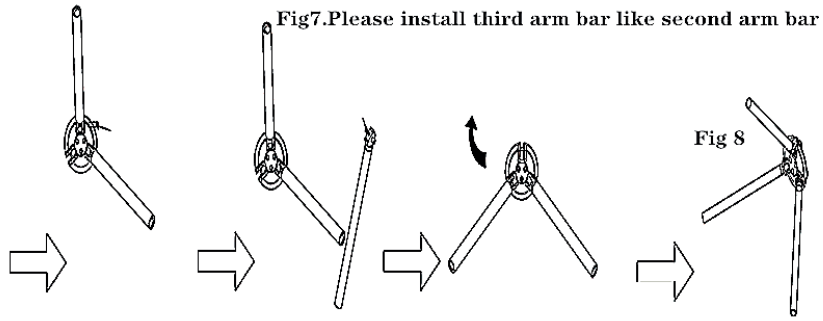


Fig7.Please install third arm bar like second arm bar

Fig 8

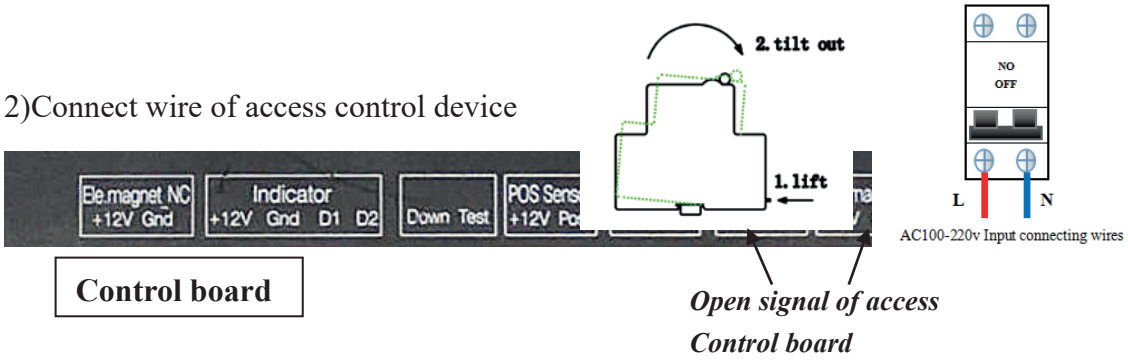
Fig5.Please insert bolt

Fig6.Please tighten hexagon socket cap screw

7) Tighten the expansion screw after the functional test is completed.

2.3 Connection 1) Connecting AC100~220V power input

2)Connect wire of access control device



2.4 Notice of use

❖ Please keep the control button or remote control far away from the children; **(2)** Please don't use the turnstile under the thunder and lightning condition to get rid of damage to the equipment. **(3)** Do not permit children to play on or around a turnstile . If child want to go through the turnstile, the parents must look after them.

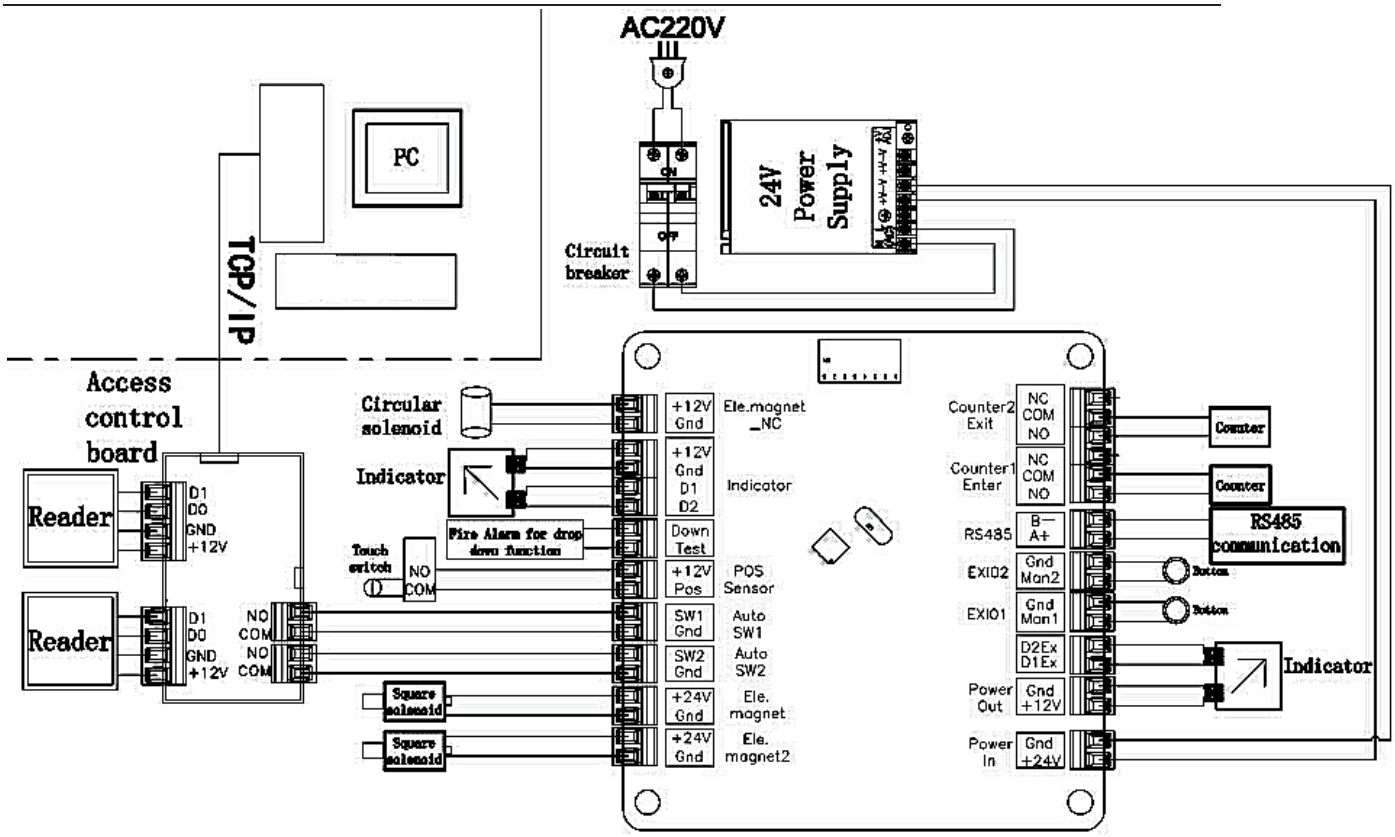
3 Control Board and wiring diagram

3.1 Control Board instruction

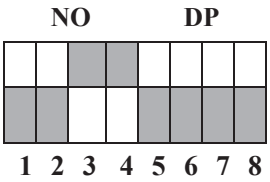
No	Port Sign	Instructions
1	+24V	24V input power supply to PCB board**(Power in)**
2	GND	
3	+12V	12V power Output **(Reserved 12V port)**
4	GND	
5	D1Ex	**(Reserved port)**
6	D2Ex	
7	Man1	Entrance direction button for manual opening gate input
8	GND	
9	Man2	Exit direction button for manual opening gate input
10	GND	
11	A+	485 communication
12	B -	

13	NO	Entrance relay normally open and normally close interface which also can connect entrance counter
14	COM	
15	NC	
16	NO	Exit relay normally open and normally close interface which also can connect exit counter
17	COM	
18	NC	
19	+12V	+12 V power supply for arm drop down **(circular electromagnt)**
20	GND	
21	D1	Entrance LED indicator signal input **(indicator)**
22	D2	Exit LED indicator signal input **(indicator)**
23	+12V	+12 V power supply for indicator
24	GND	
25	Down	Testing for drop down function
26	Test	
27	+12V	Position sensor full close in place signal input,once arm turn 120 degree , it will give closing gate signal **(Position sensor)**
28	POS	
29	SW1	**Entrance opening signal input**, Dry contact signal and Access control PCB board entry opening relay signal (NO connect SW1, COM connect GND, and the relay time of access control board should be set **0** or **1**）
30	GND	
31	SW2	**Exit opening signal input** (The same function with SW1)
32	GND	
33	+24V	Output for entrance square solenoid, normally 0 voltage, when board recieve open singal,This port will be 24v output **(Square solenoid 1)**
34	GND	
35	+24V	Output for exit square solenoid, (Square solenoid 2 the same function with solenoid 1,just opposite direction)
36	GND	

3.2 wiring diagram



3.3 DIP switch instructions



Factory default 3 4 dial to NO(5 seconds)

1-6 DIP indication						Automatic reset times	8 DIP
6	5	4	3	2	1	Times	Swipe card memory
0	0	0	0	0	1	2S	Swipe card memory(Default no open)
0	0	0	0	1	0	2S	
0	0	0	0	1	1	2S	
0	0	0	1	0	0	2S	
0	0	0	1	0	1	2.5S	
0	0	0	1	1	0	3S	
0	0	0	1	1	1	3.5S	
0	0	1	0	0	0	4S	
0	0	1	0	0	1	4.5S	
0	0	1	0	1	0	5S	
0	0	1	0	1	1	5.5S	

0	0	1	1	0	0	6S	
0	0	1	1	0	1	6.5S	
0	0	1	1	1	0	7S	
0	0	1	1	1	1	7.5S	
0	1	0	0	0	0	8S	
0	1	0	0	0	1	8.5S	
0	1	0	0	1	0	9S	
0	1	0	0	1	1	9.5S	
0	1	0	1	0	0	10S	
0	1	0	1	0	1	10.5S	
0	1	0	1	1	0	11S	
0	1	0	1	1	1	11.5S	
0	1	1	0	0	0	12S	
0	1	1	0	0	1	12.5S	
0	1	1	0	1	0	13S	

with memory function, if swiping valid card 5 times, it can pass five peoples; without memory function, if swiping valid card 5 times, it only can pass one people.

Warranty Service Statement

Our company products are guaranteed for one year, from date of sale, providing free maintenance based on not being damaged by any man-made.

● During the warranty period, all faults caused by the product itself can be maintained for free. Please carry the filled warranty card and the purchase invoice to the authorized service centers across the country or return the machine to our company for free repair.

● Within the period of free maintenance, faults or damages caused by man-made or natural disasters can be maintained with additional charge.

● Over the period of free maintenance, faults or damages can be maintained with additional charge.

The following conditions are not under warranty:

● Damages caused by abnormal operation, man-made or natural disasters;

● Damages after disassembling any portion of the machine (lines, components etc.) ;

● Damages caused by wrong guide of non-professional technicians;

● Damages caused by adding other functions with unauthorized modification or installation with other equipment.

Note: The warranty card and purchase invoice are used as warranty certificates to maintain the machine. Please reserve them carefully. Lose won't repair.