INSTALLATION MANUAL

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01

Installation instruction

Installation Requirement

1、 The ground surface where the gate is installed should be level;

2、The concrete grade >= C30 (For outdoor installation);

3、Concrete thickness>=200mm;

4、The ground must be frost-free and have good bearing capacity;

5、The turnstile must be grounded;

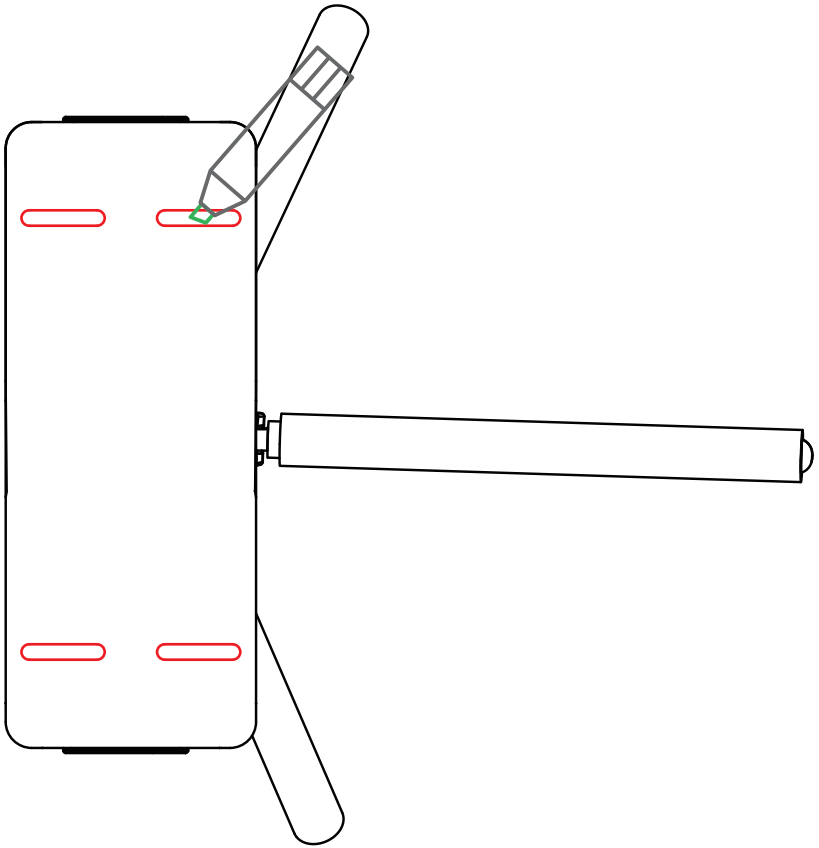
6、The power cord should be no less than RVV3*2.0;

7、When installing, make sure the body is horizontal and the turning bar is vertical.

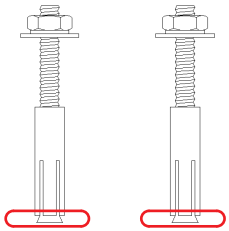
Installation

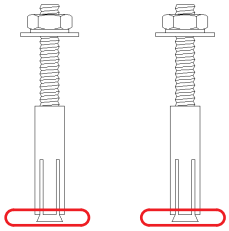
According to the channel requirements, place the equipment in good condition, ensuring that both ends of the equipment are level and the channel width is consistent

Mark the fixed hole position



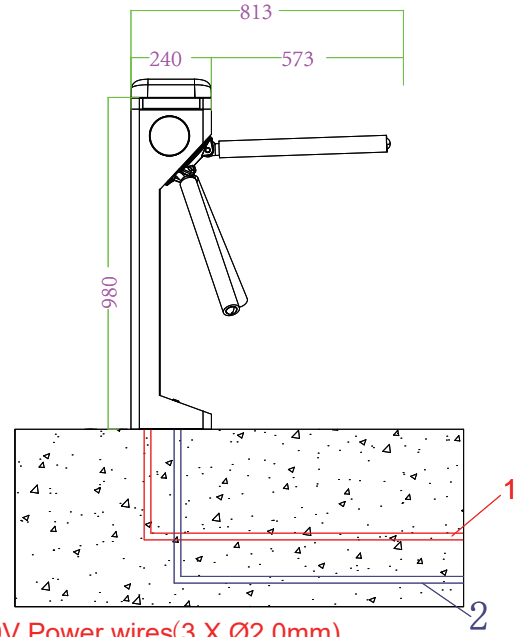
Move the device away and embed M12 * 100 expansion screws according tothe marked hole positions





Buried wires according to wiring diagram ahead of time

(Note: This device only needs power cords. If other access control equipment is installed, wiring can be done according to actual conditions.)



Installation Manual:

1 The Ø20mm PVC tube for AC 220V Power wires(3 X Ø2.0mm).

2 TCP/IP ethernet cable for connecting access device to PC.

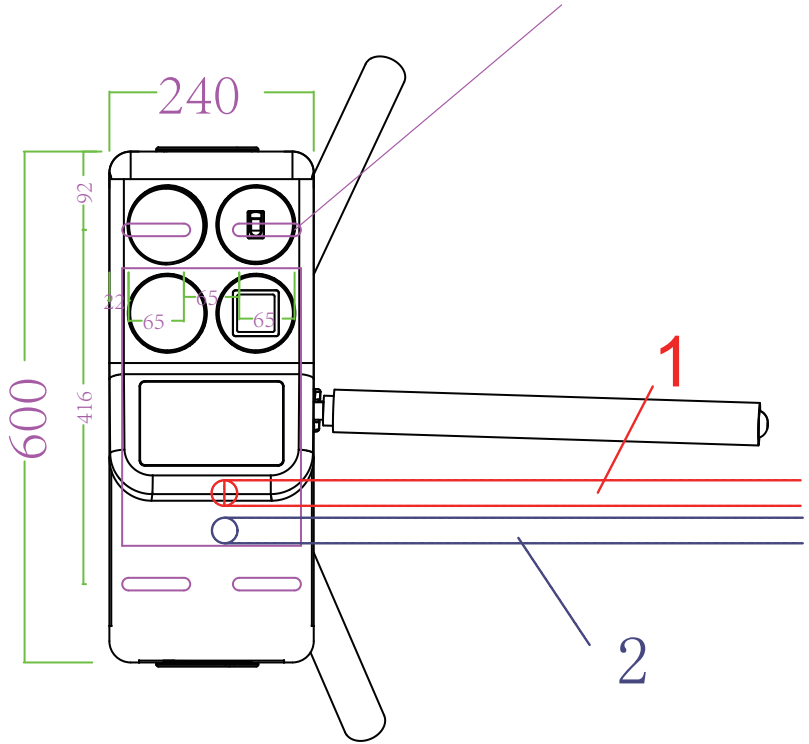
3 Control board .

4 Fixing the equipment with M12 X 100mm expansive bolt .

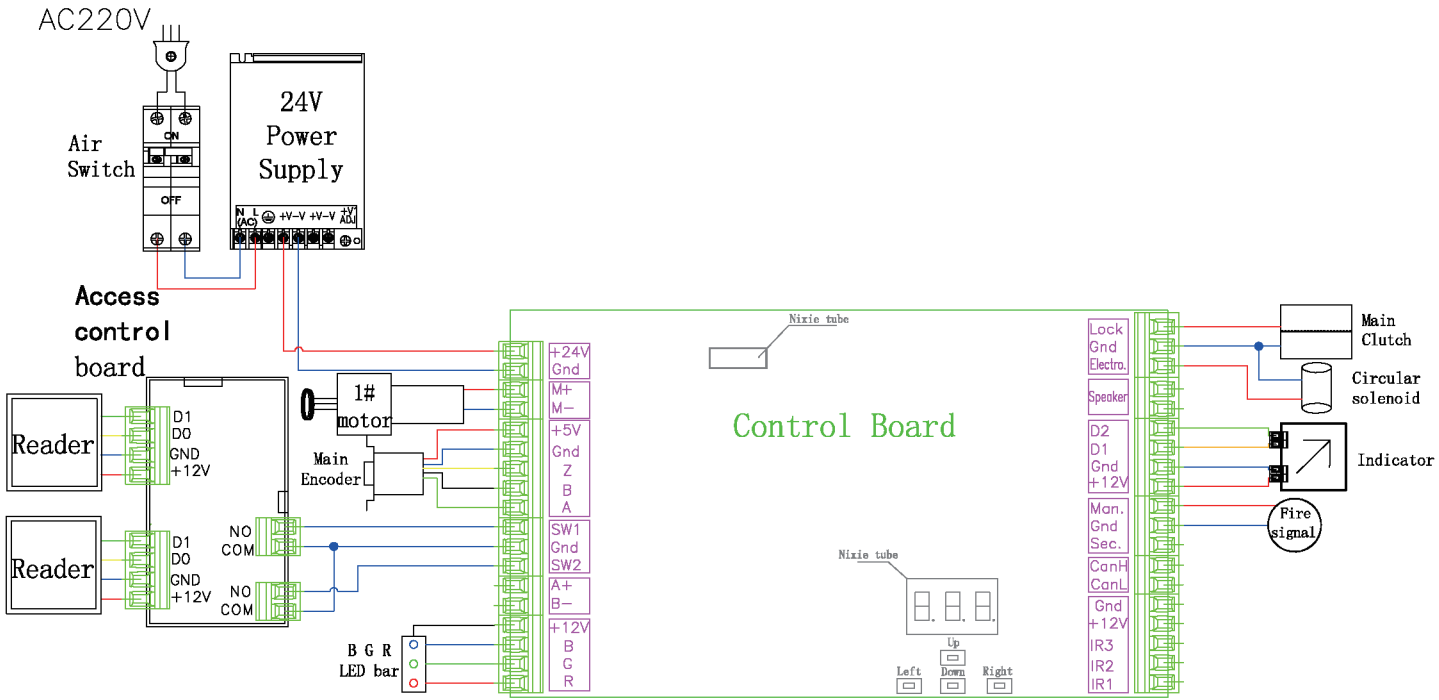
Mark:All wires extending out of the ground shall be no less than 2M.

Turnatile installation and fixation

(M12X100mm expansive bolt)



Wiring diagram



Model name: Full automatic Tri-pod Turnstile	Product name: Electrical wiring diagram	Revision: 6A

02

Testing

Testing

1. Check the wiring: According to the wiring diagram, check whether the online and power lines of the gate are connected correctly. Only after confirming that they are correct can the power be turned on. If there are any abnormalities during the power on process Always disconnect the power and check the connecting wires first.
2. Function debugging: After power on, the gate is opened and closed, then opened and finally closed. This process is a machine self-test, and the self-test is completed after two beeps of two seconds. Do not block the infrared during the process and do not stand in the channel.
3. Enter the lines without swiping card, the turnstile will always alarm; if no alarm, please check if the infrared sensors are aligned. When they are aligned, the infrared receiver lights up red; When they are not aligned, and then the infrared receiver will not light up red, please adjust and align the infrared sensors.
5. When flashing a valid card, the indicator light turns into a green arrow. If the direction indicated by the indicator light is incorrect or if the entrance gate is closed immediately and an alarm is triggered, switch to SW1 Simply swap the Gnd and SW2 Gnd wiring.
6. Carefully inspect and test to ensure that there are no abnormalities in the door opening and closing, the indicator lights are correct, and the infrared anti pinch function is normal before putting it into use.

Parameter Description

menu	illustrate
	Any parameter modification operation is not recommended
F01	Setting zero position “xxx” Encoder detected current angle 0-359
F02	Entry open angle 0-180,Flap barrier and swing gate default angle within 0-90 , the number is
	more bigger, which mean that the angle is more bigger (default 80-88)
F03	Exit open angle 0-180,Flap barrier and swing gate default angle within 0-90 , the number is
	more bigger, which mean that the angle is more bigger (default 80-88)
F04	The buffer of entry close angle 0-120,The bigger value, The bigger buffer.
F05	The buffer of entry close angle 0-120,The bigger value, The bigger buffer.
F06	The lowest speed of motor 5-100(default 20-25)
F07	The fastest speed of motor 5-100(80-100)
F08	Pass model 1-13 1 : Normally close, use card for entry and exit (default)
F09	Memory pass: “0” forbidden (default), “1” allow
F10	The max of pass time 10-255, unit 0.1s, (default 5)
F11	Open delay 0-255, unit 0.1s, (default 0)
F12	Close delay 0-255, unit 0.1s, (default 0)
F13	Swipe card in lane “0” forbidden (default), “1” allow
F14	Pass over and check position “0” exit, “1” anti-pinch

F15	Change status, automatic alarm “0” Forbidden, “1” allow
F16	Relay output, which use for account passenger “0” Forbidden, “1” allow
F17	Clear accouter “0” cancer “1” clear
F18	Number of turn-arm 2-6
F19	Stop work, whether use clutch or not “0” No use, “1” use
F20	Sensor infrared model “0” PNP, “1” NPN
F21	The motor over-current protection value 0-200, unit 100Ma (Invalid)
F22	Encoder resolution 0(360), 1(500), 2(512), 3(720), 4(800), 5(1000), 6(1024), default 500
F23	Reduction ratio, input speed 1-999
F24	Reduction ratio, output speed 1-255
F25	RS485 baud rate 1-9 4: 9600 (Default)
F26	Versions
F27	Factory reset “0” cancel, “1” Factory reset, “2” absolutely reset
F28	Save current parameters as factory default
F29	IR Speed: 0-100
F30	Normally open mode, turnstile opening direction: 0 Entry (Default), 1 Exit
F31	Intrude Set: 0 None, 1 Alarm, 2 Alarm & Close
F32	Reverse Set: 0 None, 1 Alarm, 2 Alarm & Close
F33	Tailgating Set: 0 None, 1 Alarm, 2 Alarm & Close
F41	Entry Voice: 1-10, 0 no voice
F42	Exit Voice: 1-10, 0 no voice
F43	Alarm Voice: 1-10, 0 no voice

F93	Input test
F94	Output test
F95	Automatic close and open test
F96	Slave device communication test
F97	Device address 2-127
F98	Device remark “0” No use, “1” The host device, “2” The slave device
F99	Setting device address 2-127
Abnormally code instruction	“EC.1” CAN bus fault _STUFF
	“EC.2” CAN bus fault _FORM
	“EC.3” CAN bus fault _ACK
	“EC.4” CAN bus fault _BIT1
	“EC.5” CAN bus fault _BIT0
	“EC.6” CAN bus fault _CRC
	“EC.7” CAN bus fault _UNUSED
	“E33” Can not defect encoder (During self-test)
	“E34” The fault of encoder resolution(The tri-pod turnstile can detect it)
	“E35” Can not find zero position (During self-test)
	“E48” Motor 1 direction and encoder test direction is inconsistent (During self-test)
	“E49” Can not test motor 1 (During self-test)(Maybe PCB Board ADC fault, please try again)
	“E50” Motor1 blocked off(over current protection)(Invalid value)
	“E51” Motor1 can not stop(When stop, but still have current)
	“E52” Motor 1 can not arrived zero position when entry open timeout

	“E53” Motor 1 can not arrived zero position when entry close timeout
	“E54” Motor 1 can not arrived zero position when exit open timeout
	“E55” Motor 1 can not arrived zero position when exit close timeout
	“E64” Motor 2 direction and encoder test direction is inconsistent
	“E65” Can not defect motor 2
	“E66” Motor2 blocked off(over current protection)
	“E67” Motor2 can not stop(When stop, but still have current)
	“E68” Motor2 can not arrived zero position when entry open timeout
	“E69” Motor2 can not arrived zero position when entry close timeout
	“E70” Motor2 can not arrived zero position when exit open timeout
	“E71” Motor2 can not arrived zero position when exit close timeout
	“E96” Force entrance alarm “E97” Reserve entrance alarm
	“E98” Trailing alarm “E99” External Alarm
Status code instruction	“U00” Turnstile have closed(free) “U01” Turnstile have closed (Fire)
	“U02” Turnstile have closed (Power off) “U03” Turnstile have closed (Free)
	“U04” Turnstile have closed (Fire) “U05” Turnstile have closed (Manual)
	“U06” Turnstile have closed (Exit) “U07” Turnstile have closed (Entry)
	“U08” Close turnstile when entrance “U09” Close turnstile when exit
	“U10” Close turnstile when entrance “U11” Close turnstile when exit (Have people in lane)
	“U12” Open turnstile when entrance “U13” Open turnstile when exit
	“U14” Push the flap for entrance by manual “U15” Push the flap for exit by manual

03

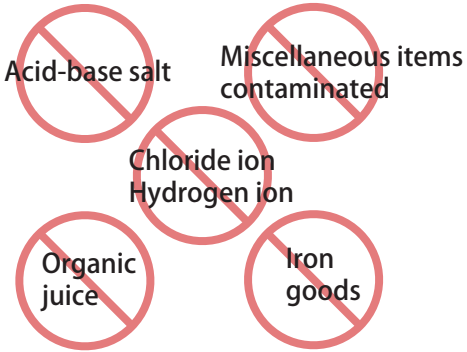
Troubleshooting and Maintenance

Troubleshooting

Basic concepts: Infrared radiation consists of a receiving end and a transmitting end. The green light at the tail of the transmitting end is always on, and the receiving end (with 3 wires, brown, 12V, blue, Gnd, black) When the signal line is unobstructed, the red light at the tail does not light up, and there is no voltage output between the black signal line and the blue line. When there is obstruction, the red light at the tail lights up, and the black signal。 There is voltage output between the
number line and the blue line

Question	Solution
1、The indicator light is not on?	Switch to another test machine or use a good one to check the wiring.
2、There is one indicator light with wrong direction?	Swap the connection between D1 and D2 terminals of control board.
3、After swiping the card, one side of the door wing remains stationary?	Check if the wiring is loose; Power off and check if the connecting wires are properly connected; Check the electrical of the control board separately.The ports W, V, and U of the machine correspond one-to-one with the color of the line sequence
4、Open the gate upon entering the channel?	Change the two-way free access mode of the control panel menu to card swiping mode。
5、After swiping the card, enter the channel to sound an alarm and close the gate	Connect the opening signal to the two terminals of the anti adjustment control board, SW1 GND and SW2 GND。

Note



Why does 304 stainless steel rust?

Environmental factors can cause corrosion and rusting of stainless steel, especially the presence of hydrogen ions and chloride ions. For example, hydrogen ions and chloride ions are present in table salt/sweat/sea water/sea breeze/soil, etc. Stainless steel corrodes quickly in the presence of chloride ions, even more than ordinary low carbon steel. Therefore, there are requirements for the working environment of stainless steel, and it needs to be wiped frequently to remove dust and keep clean and dry.

Stainless Steel Turnstile Maintenance Manual

Dear Customer ,

Hello! Thank you for purchasing our company's products. Our company solemnly promises to customers that the pedestrian turnstile products you purchase are all made of high-end stainless steel 304. The sophisticated production technology is applied thoroughly all production process. With strict quality inspection, the product quality is assured. Affected by improper operation and climate environment, various components will inevitably become worn and cracked, resulting in rust and poor customer experiences. Therefore, we recommend that you give your products regular maintenance and keep your products new.

Type: Surface dust, chemical liquid, dirt and acid and alkaline substances

Solutions: Wash with wet soft non-woven cloth, then wipe clean, then scrub with alcohol, and then wipe the whole body of the turnstile with WD-40 rust remover;

Maintenance cycle: Weekly

Type: The surface has rainbow patterns or the surface color is dull

Solutions: Wash with wet soft cotton cloth, then wipe clean, then scrub with alcohol, and then wipe the whole body of the turnstile with WD-40 rust remover;

Maintenance cycle: Weekly

Type: Check the moving parts for abnormal noise or looseness

Solutions: Apply butter to the moving part

Maintenance cycle: Quarterly

Type: Check if fasteners are loose or not and circuits is abnormal or not

Solutions: If the fastener is loose, then fasten. If the circuit is abnormal, eliminate the problems.

Maintenance cycle: Annual

Maintenance tools and materials

1、Cleaner: Choose mild stainless steel cleaners and avoid using cleaners with acidic or alkaline ingredients.

2、Soft cloth or sponge: Spray cleaners on a soft cloth （or sponge） to clean the turnstile surface.

3、Water: wash surface dirt.

4、Drying cloth: wipe off surface moisture.

5、WD-40 Rust Remover: Remove rust caused by long-term exposure to corrosive environment.

6、 Lubrication: lubricate bearings, locking arms, transmission joint components.

Note：

1、 Avoid using cleaners with acidic or alkaline ingredients, which may make the surface rust.

2、Avoid using sharp or hard objects to scratch the turnstile surface, which will affect the appearance of the turnstile surface.

3、Keep surface dry, Avoid making the turnstile in moisture for a long time. Water stains will cause stainless steel to rust. If there are water stains on the surface, wipe clean immediately.

4、Regular inspection and maintenance,regularly check the turnstile surface condition to promptly find and resolve existing problems. If there are rust or scratches on the surface, please maintain or replace in time.