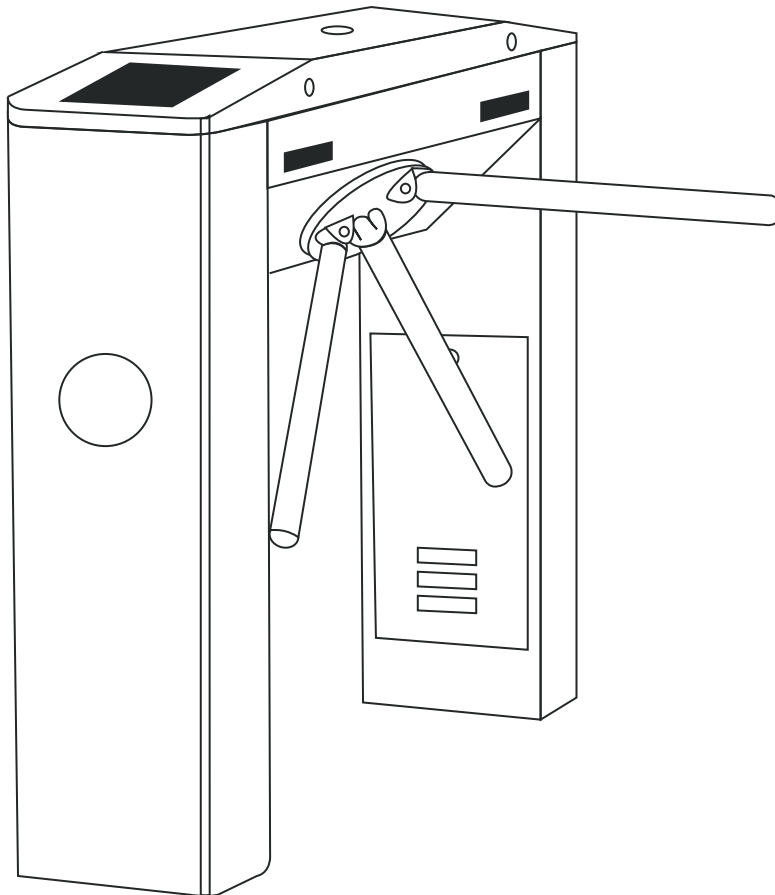


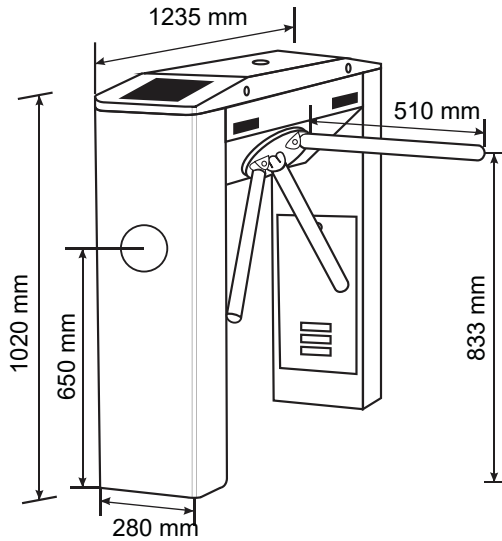
# User guide for **TTS 470** Motorized tripod turnstile



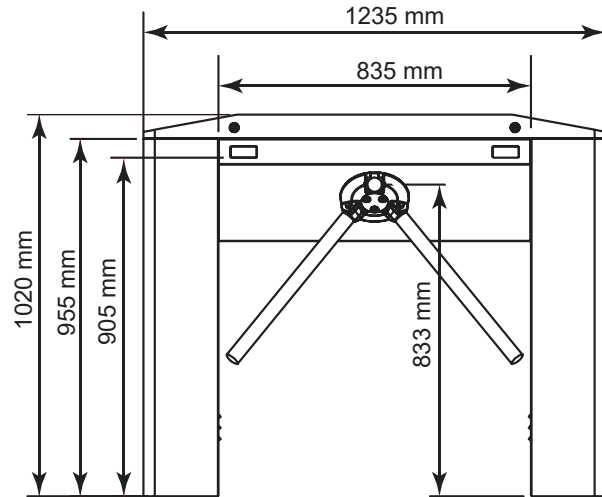
#### Product safety precaution:

- 1) In case of emergency, isolate the power from the power supply.
- 2) Improper installation can create danger (such as electric shock or fire).  
Please engage specialist for the proper installation work.
- 3) Do not install the turnstile in a potentially explosive atmosphere.
- 4) Do not operate with wet hands.
- 5) If abnormal condition (burnt smell. Etc) occurs, switch off the power supply.
- 6) Do not operate turnstile exposed to direct sunlight when cover open.
- 7) Do not install turnstile at sea side.
- 8) Strictly indoor or well shaded outdoor application.
- 9) **NOT** Water proof.

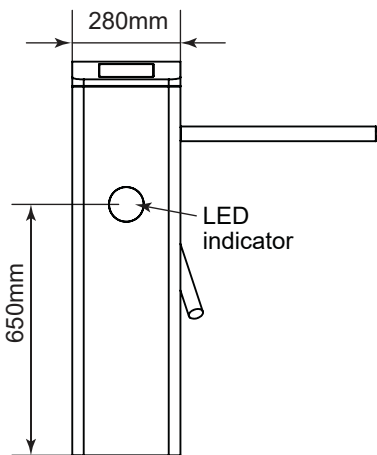
### 1) Dimensio specification



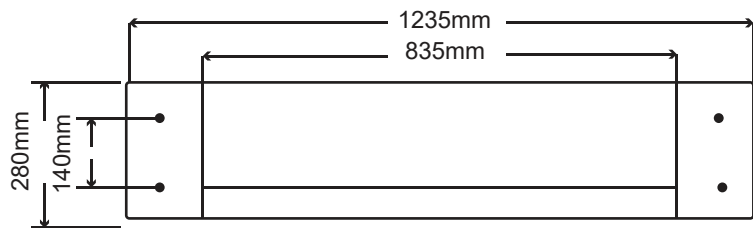
Overall view



Front view

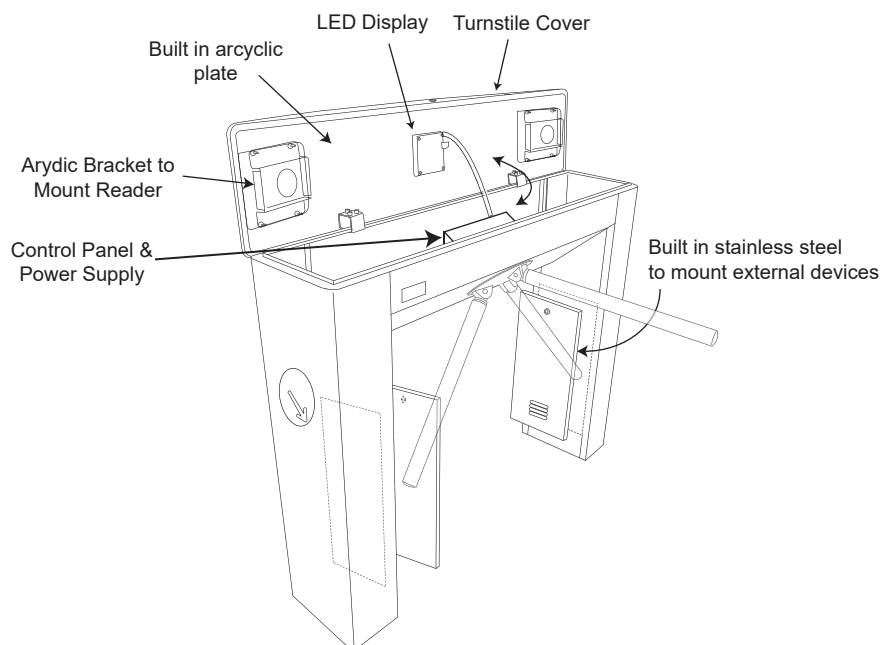


Side view



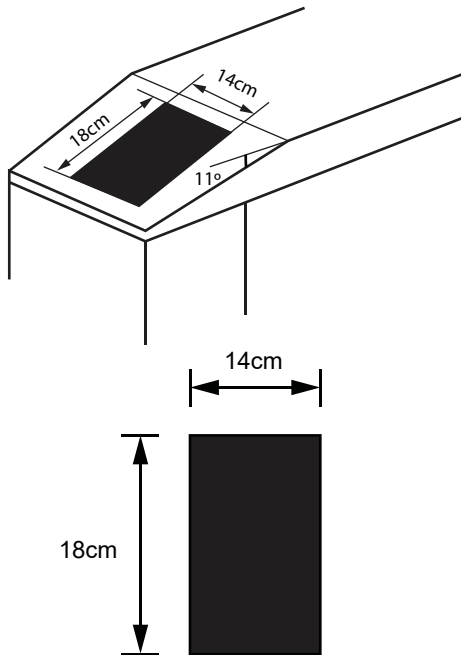
Dimension of fastening hole

Top view

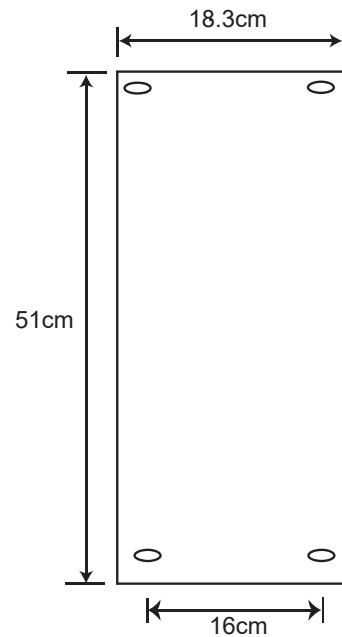


Isometric View

### a) Acrylic Plate Dimension

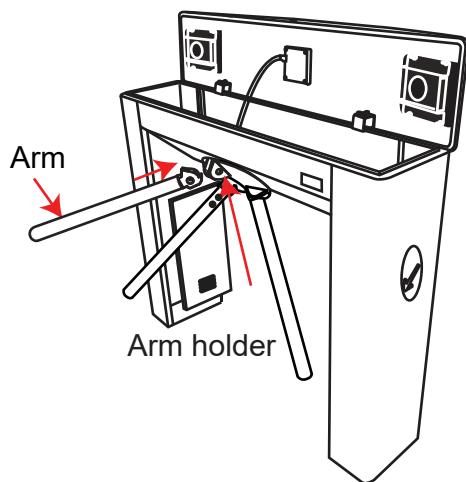


Mounting plate at Turnstile Leg  
For external device integration

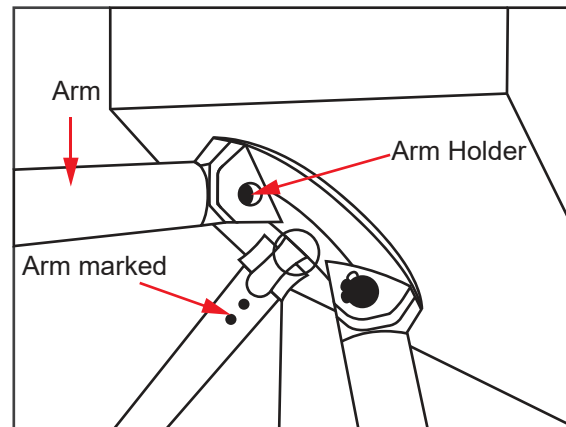


### 2) Arm Installation Diagram

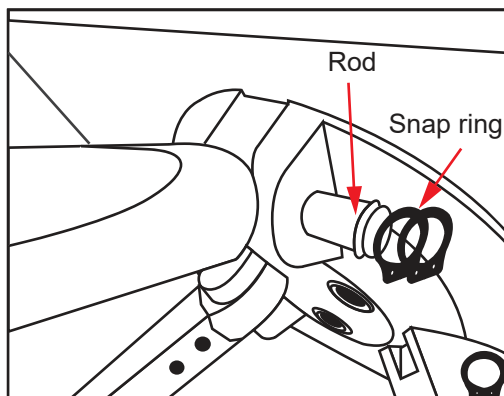
Step 1 : Place the arm into the holder



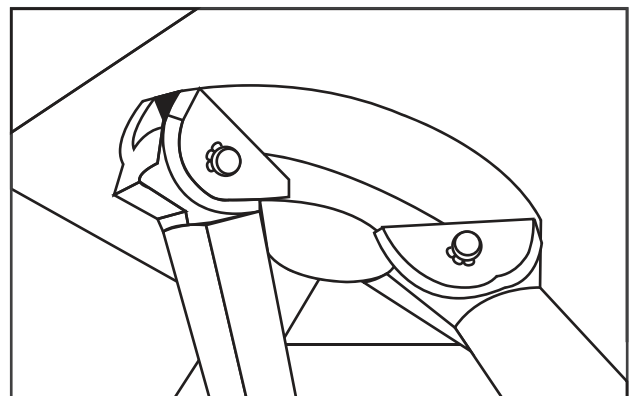
Step 2: Make sure the arm marked is positioned inside



Step 3 : Insert rod into arm holder, and fix the rod with snap ring both side.

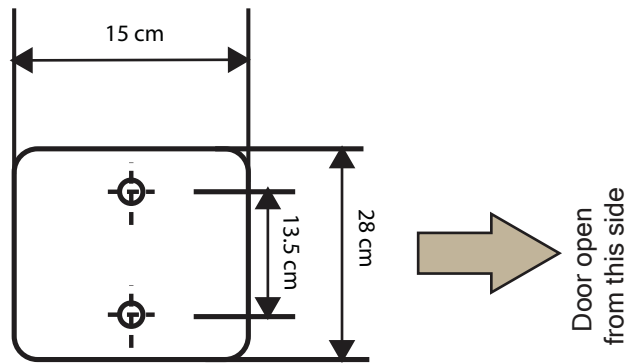


Step 4 : Fix all rod and make sure all rod have snap ring

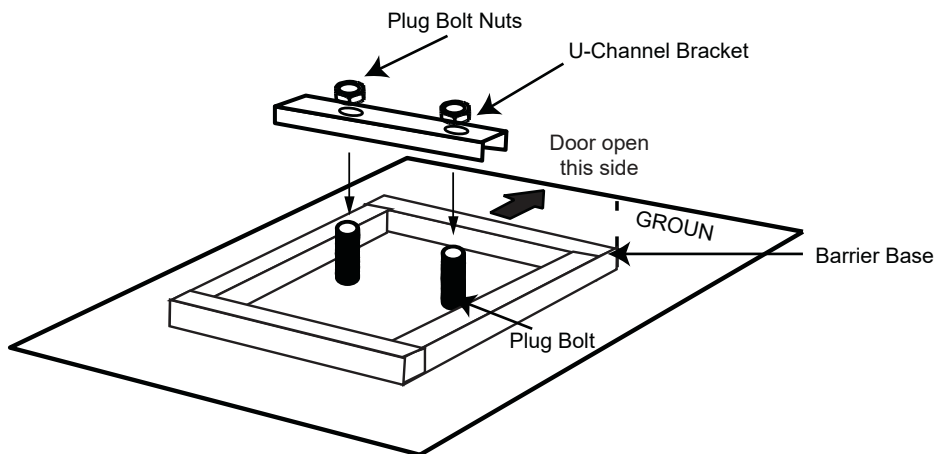


### 3) Base Installation

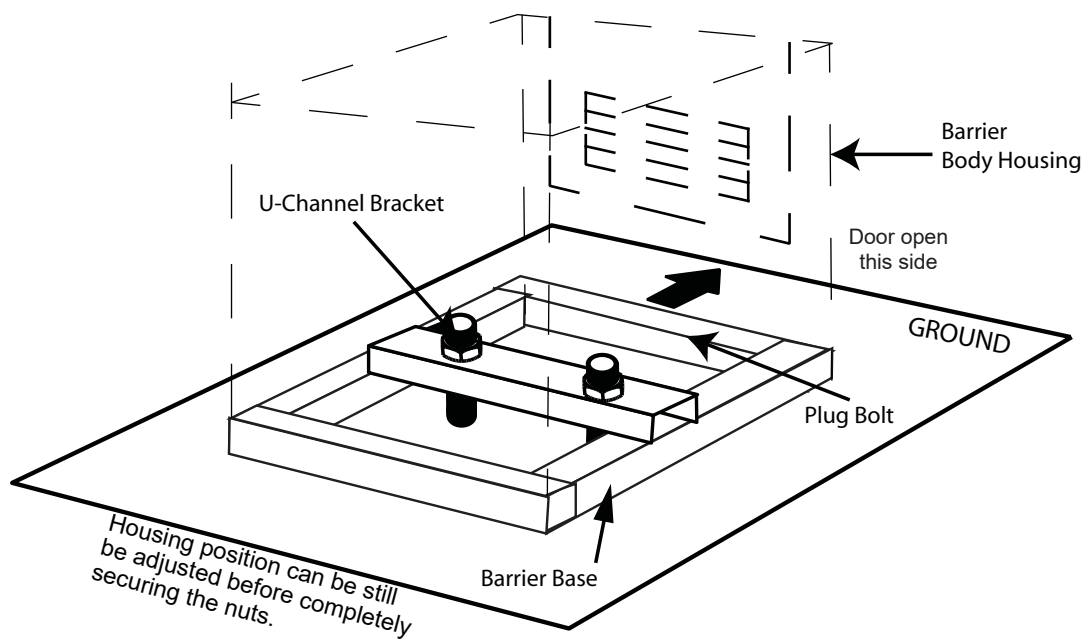
3.1 Mount the barrier base on the ground with screw. Refer to diagram below:



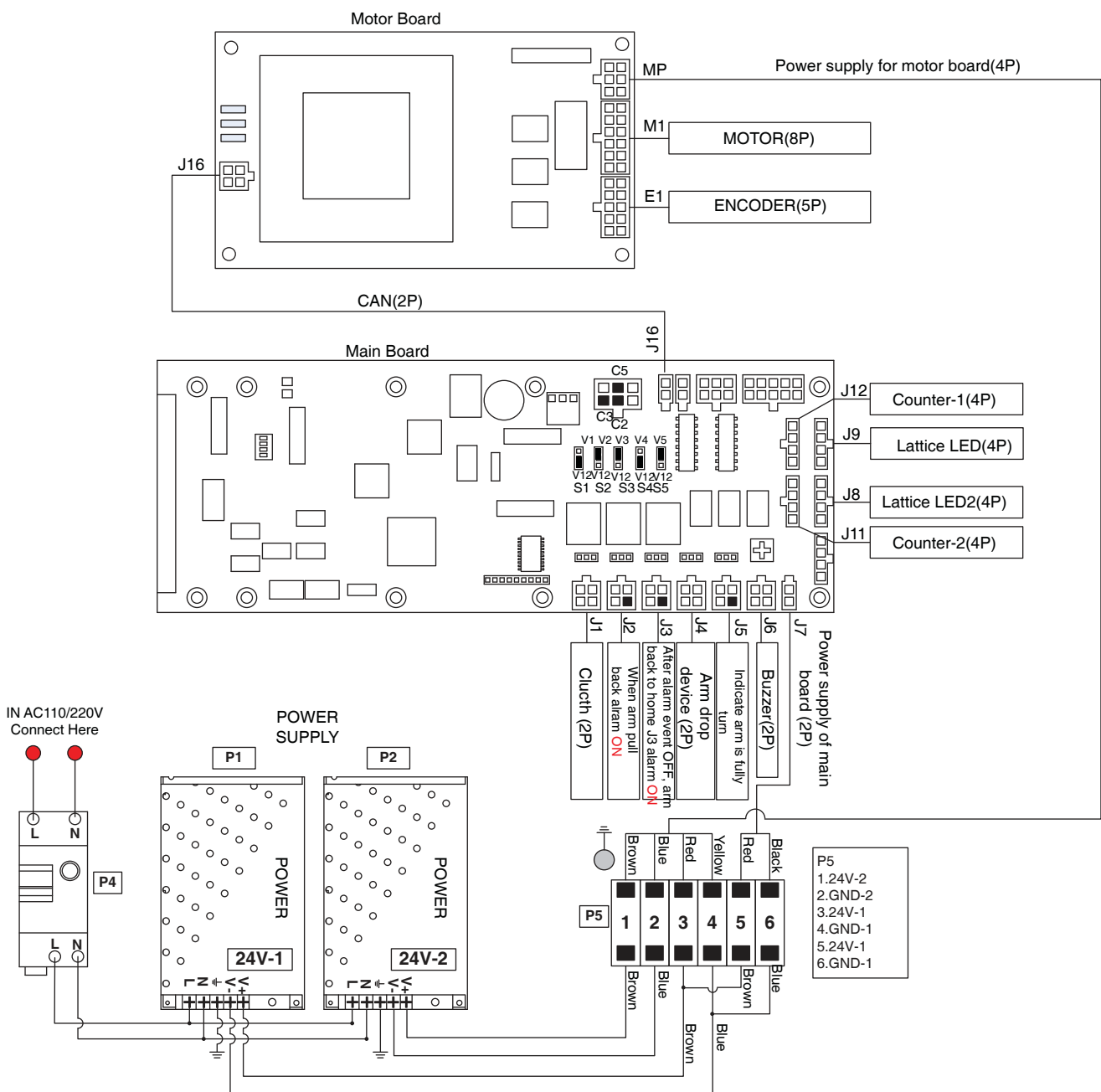
3.2 Do marking on the based ground on plug bolt distance (refer below diagram)



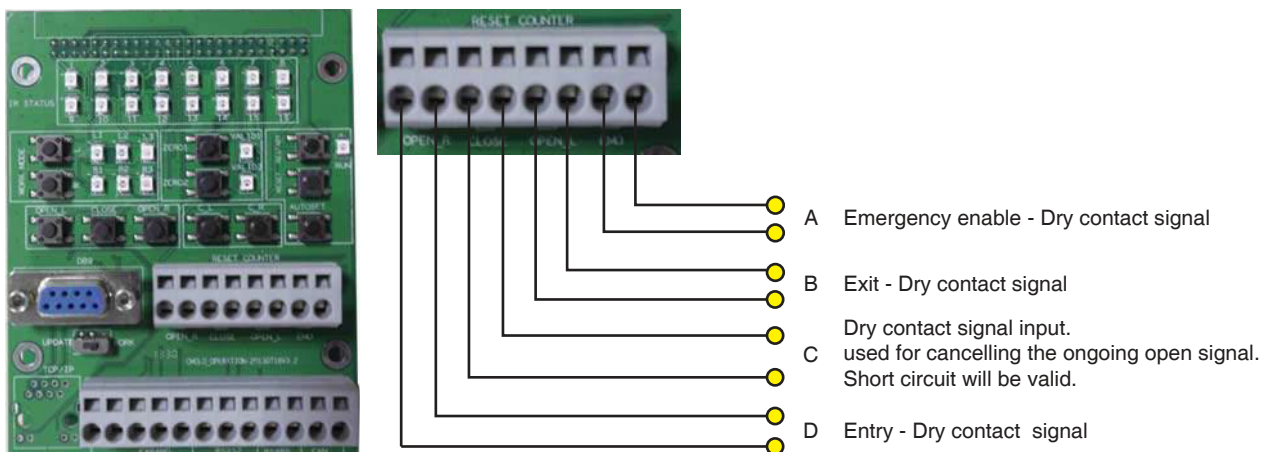
3.3 Screw U channel bracket on the ground. Refer below diagram



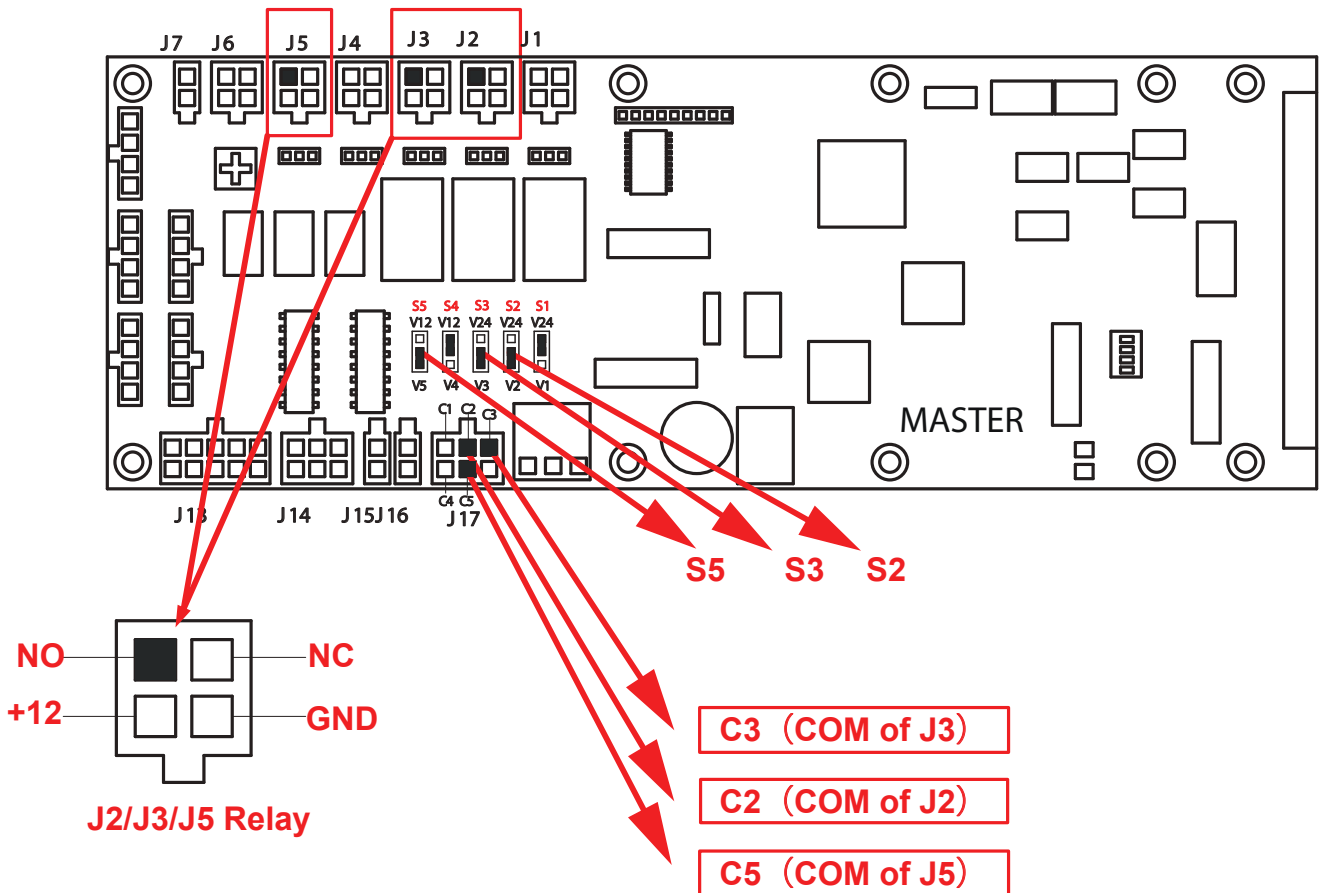
#### 4) Wiring Interface



#### 5) Wiring connection



## 6) Alarm output



### Instruction:

1) J2 Dry contact output (NC) pulse 750 msec to indicate the alarm is triggered

2) J3 Dry contact output (NC) pulse 750msec to indicate the alarm is finished.

3) J5 Dry contact output (NC) pulse 200msec to indicate arm rotation has been complete.

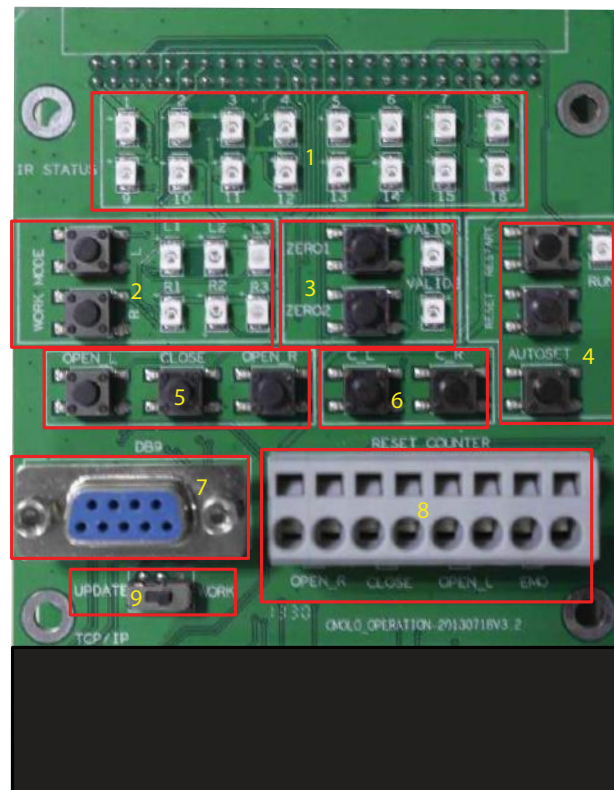
4) How to used J2,J3 or J5 relay output:

a) NO & NC of J2,J3 and J5 is shown as the picture above:

b) While jumper is on the position of V24 (Near the relay), the COM of J2, J3 and J5 is DC24V+, While the jumper is on the position of V2, V3 or V5 (far away frm the relay), the COM of J2, J3 and J5 is accessed from C2, C3 or C5 of J17.

c) Used V2, V3 and V5 to activated COM.

## 7) Control panel function



### 1. Infrared sensor indication

- Tripod turnstile not used this function

### 2. Working modes setting for entry and exit direction

- L: Switch the working mode of entry direction ( controlled-free-forbidden, switch circularly)
- R: Switch the working mode of exit direction ( controlled-free-forbidden, switch circularly)
- Direction indicator light indicat the working modes at the correspond-ing direction.
- L1 (Green): Light ON mean Entry direction is free passing mode
- L2 (Red): Light ON mean Entry direction is forbidden passing mode
- L3 (Yellow): Light ON mean Entry direction is controlled passing mode
- R1 (Green): Light ON mean Exit direction is free passing mode
- R2 (Red): Light ON mean Exit direction is forbidden passing mode
- R3 (Yellow): Light ON mean Exit direction is controlled passing mode

### 3. Zero adjustment

- ZERO 1: The closed position adjustment of fully automatic tripod turnstile. After pressing the ZERO1, the VALID 1 light up, manually adjust the arms to the closed position and press ZERO1 again until the VALID light is off.
- ZERO 2: Tripod turnstile are invalid.

### 4. Reset, Restart and Automatically adjustment

- RESTART: Restart the turnstile system
- RESET: Reset the default setting of the turnstile systems
- AUTOSET: The semi-auto tripod turnstile are invalid
- RUN: The indicator light of running status. The light will flicker per second when the turnstile works normally

### 5. Testing buttons

- There are three button on the panel can directly test the left gate open, right open and close the gate.
- OPEN L: Open gate at Entry direction
- OPEN R: Open gate at Exit direction
- CLOSE: Tripod turnstile are invalid

### 6. The reset button of counter

- C\_L: Clearing Entry counting
- C\_R: Clearing Exit counting

### 7. DB9

- Used for downloading and upgrading the firmware of turnstile control panel
- One of the default communication interfaces of turnstile

### 8. Turnstile dry contact control input

- Use the switch signals such as relay signal and buttons and so on can control turnstile opening & closing.
- OPEN\_R: Entry direction open
- OPEN\_L: Exit direction open
- CLOSE: Tripod turnstiles are invalid
- EMO: Emergency open gate (normally open signal); the effective signal less than 1 second is the arm-dropped testing.

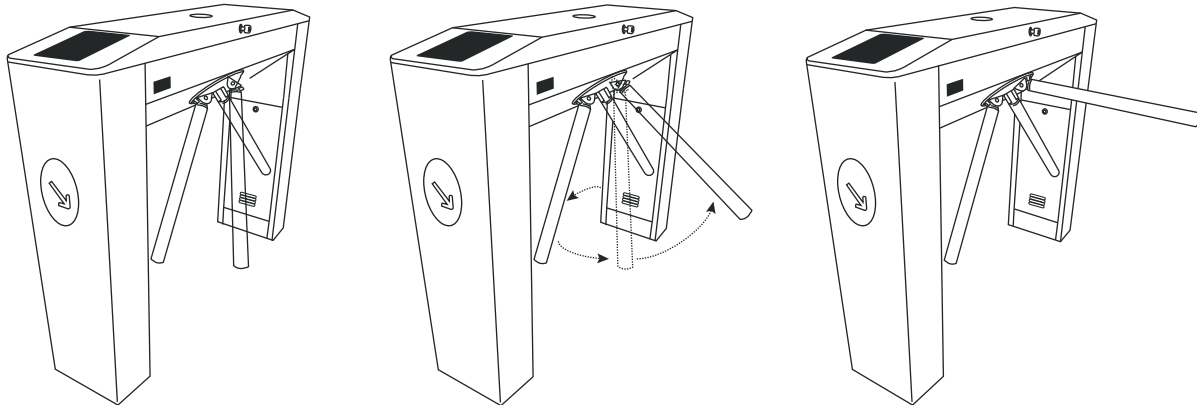
### 9. Download protection lock

- When the turnstile needs to download and upgrade the new program, please toggle the switch to "UPDATE" position, and then download and upgrade the program through 7. (DB9) interface.

Attention when turnstile is normal working, user must toggle the switch to the "WORK" position.

## 8) Arm operation

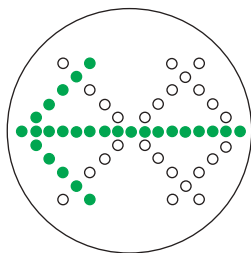
In the event of power failure, tripod's arm will automatically dropping down. The MAG TTS470 motorized tripod turnstile also support Intelligent arm up feature, turnstiles will automatically turning for 120°, then arm back to normal position (horizontal position) upon power resume.



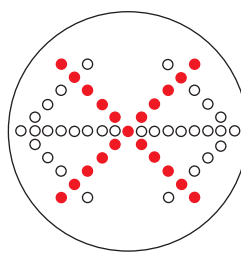
- 1) Turnstile in drop-arm condition    2) Turnstile arm turning for 1 round (automatically)    3) Turnstile back to normal condition

## 9) LED indicator

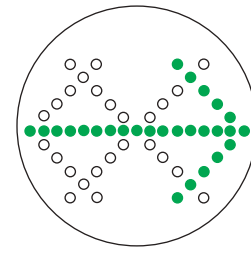
### a) Top indicator led for IN and OUT



Direction from left

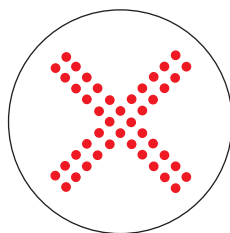


Default

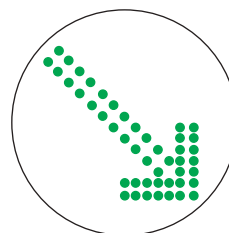


Direction from right

### b) Left and right LED indicator - Indicator for directional



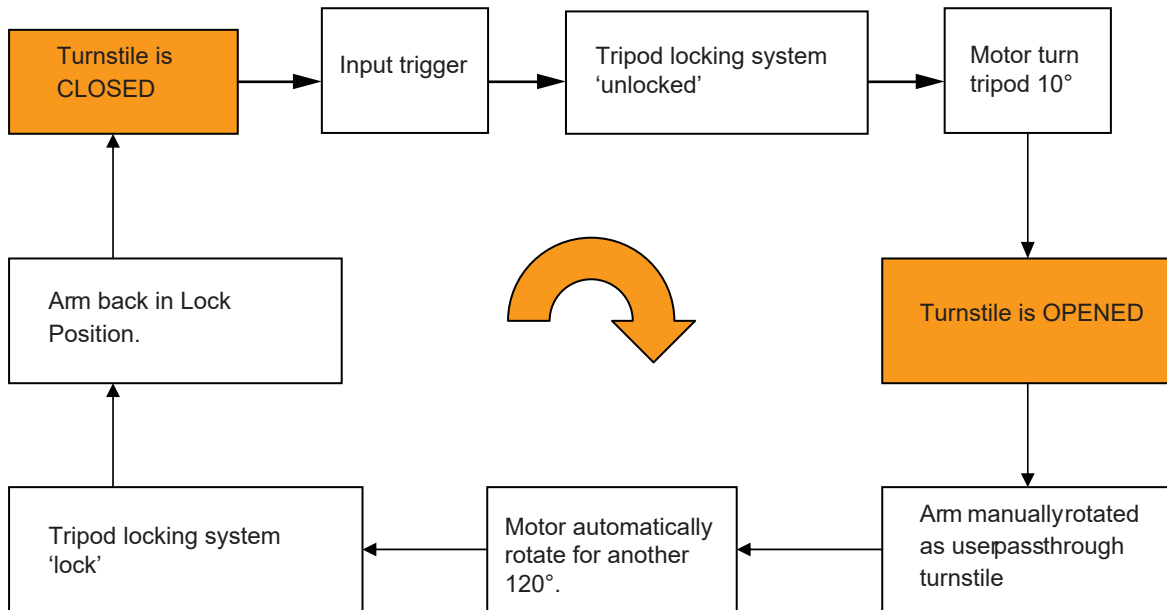
Forbidden passing



Ready for passing



### 10) Internal mechanism flow



### 11) Maintenance procedure

\*The housing of equipment is off sub polish stainless steel. It is required to clean regularly with soft cloth so as to keep a clean and polish surface.

\*Schedule check the protection grounding of the system to ensure a reliable connection.

\*Schedule checks the connector and line connection points to ensure a reliable connection.

\*Schedule checks the connection of various movement section of the equipment. Fasten timely the loose fasteners such as nut and screw; otherwise, turnstile failure may be resulted due to long term operation.

### 12) Common failure and solution

Problem	Solution
When powering on or in operation, the turnstile arm may not be locked reliably.	The failure is mainly due to drop arm solenoid or adjustable absorber being damaged or with broken line or loose connection, or the spring being broken.
Not available to read access card	The failure is mainly due to a loose connection between access reader and the main controller or the access reader may be damaged. Replace the new one access reader and carry out functional test for it.
No indication for direction and counter, and not able to read card after power on.	The failure due to power system. It is required to check carefully the 5A fuse in the main board, and see if there exist any loose connector, and broken power line