

User Manual

Flap Barrier BP-FB313



For Inquiries, Please contact:

Security Shop
Vladimira Popovica 6/6/A606
11070 Novi Beograd, Serbia
Tell: +381 11 318 68 68
office@securityshop.rs

Imported/Distributed by Security Shop doo
Licensed by Blaupunkt, 31785 Hameln/ Deutschland
Delivery and After Service shall only be covered within Serbia
www.blaupunkt.com
Made in China

Enjoy it.

Dear User:

Thanks for your trust. Please read this user manual carefully before using flap barrier.

The manual includes: main functions (our own advantages), dimensions, parameters, main board wiring diagram, installation instructions, testing, and packing list.

The user manual can help you to know more details about flap barriers, such as mechanical working theory, using guide, matters need attention.

We should use the flap barriers in right way to ensure the working life.

The user manual also analyzes some problems which maybe appear during using.

And you can find out the way to solve each problem in the manual.

At the same time, we sincerely hope that you can give us some suggestions to make our barrier gates better and better.

Thanks!

Product introduction	3
Functions and features	3
Appearance and dimension	4
Working principle of flap barrier	6
Parameters	8
Product installation	9
Installation notes	9
Wiring diagram	10
Menu operation and function debugging	11
Setting board	11
Parameter setting	11
Status information	16
Error code	16
Packing list	16
Product maintenance	17
Maintenance	17
Warranty card	18

1. Product introduction

The flap barrier is a carefully designed one by our company that can adapt to the modern "safe, fast, efficient, A new generation of high-quality "management" products. It is widely used as a tool for management in indoor places to enter and exit. It is characterized by stylish appearance, fast traffic speed, and high degree of intelligence. The swing gate is an access control system and is a modern security entrance and exit. One of the important parts of control. It can provide users with fast, safe and efficient two-way access products.

The flap barrier is mainly controlled by authorized methods, and the entry and exit of the management personnel is controlled. At the same time, the latest protection is used. The trailing control technology can quickly and accurately determine whether people are trailing. Unauthorized personnel will not be able to automatically alarm if unauthorized personnel break into the system forcibly, so as to achieve strict and effective management of the personnel, and truly realize the security and security functions of the entry and exit channels.

1.1 Functions and features

1.1.1 The body adopts 304 stainless steel chassis, ergonomic design, beautiful, generous, strong and durable.

1.1.2 The main control adopts full data management, and all functional parameters are digitally set, making the setting and operation easier.

1.1.3 The 24VDC brushless motor drive runs according to the movement curve, the operation is stable and reliable, the state is smooth, and the gate movement is coordinated and synchronized.

1.1.4 The equipment has complete functions, with illegal intrusion alarm, trailing alarm, reverse processing, gate anti-trapping, and free passage settings.

1.1.5 Single or multi-passenger working mode, motor blocking protection, exit channel delay, peak traffic mode, emergency traffic mode and other functions.

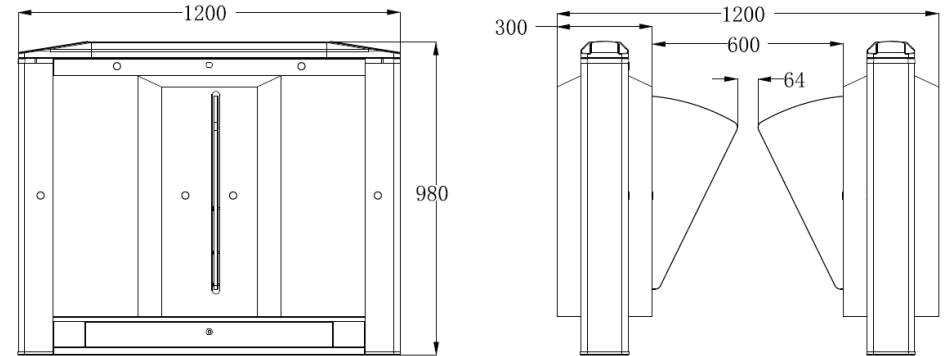
1.1.6 Complete interface modes, the NPN normally open infrared beam used on the market can be used.

1.1.7 A variety of pass indicators, green light when passing is allowed, red light when passing is forbidden or illegal intrusion, and blue light when idle.

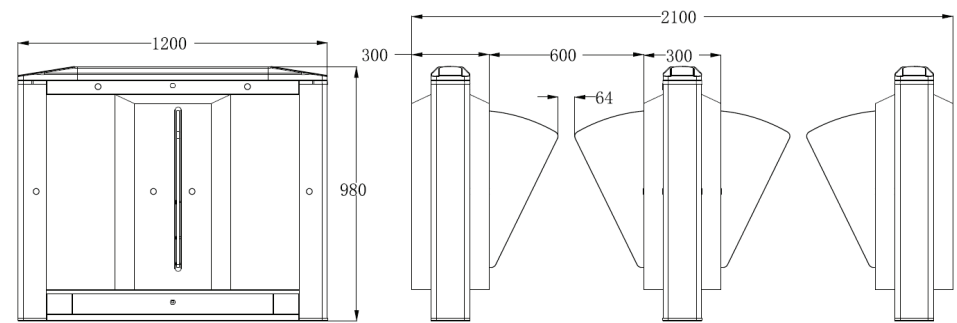
1.1.8 The control panel can be set for voice broadcast, and the greeting language direction of the entrance and exit can be set in the menu.

1.1.9 Various equipments can be integrated, such as IC/1D/RFID/OR code/barcode reader, fingerprint, face recognition, button etc.

2. Appearance and dimension



Single channel



Dual channel

Instruction: There are single core and double core for flap barrier, which are able to be combined as single channel, dual channel or even multi channels freely. The standard width of lane is 600mm.

3. Name of channel

Single Channel:

3.1 Single Channel R+Single Channel L1

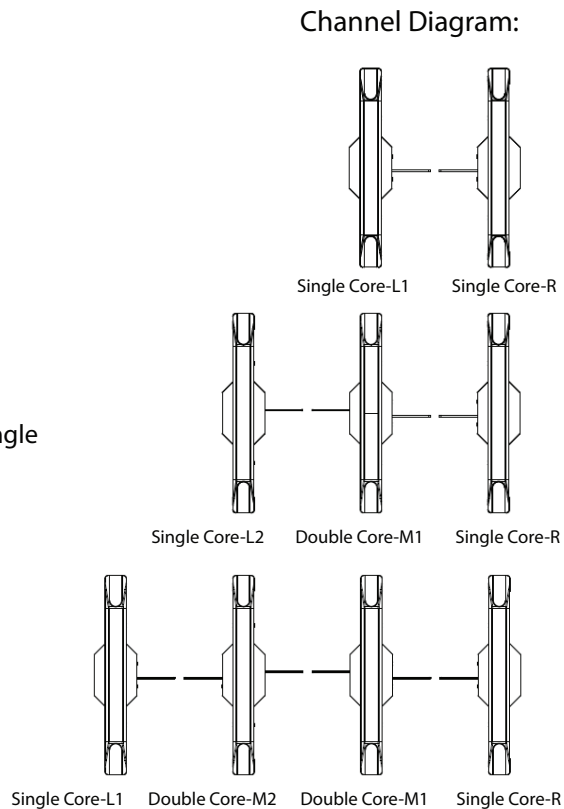
Double Channel:

3.2 Single Channel R+Double Channel M1+Single Channel L2

Triple Channel:

3.3 Single Channel IR+Double Channel M1+Double Channel2+Single

*** Single core barrier installs master controller, L1 and L2 install slave controller.



Multiple Channel

Instruction: There are single core and double core for flap barrier, which are able to be combined as single channel, dual channel or even multi channels freely. The standard width of lane is 600mm.

4. Working principle:

4.1 Authorized Passing

LED light turns green and flap barrier open when people swipe authorized card, and IR sensor detects user entering the lane. The barrier will be closed and locked quickly after user passing.

4.2 Unauthorized people

Unauthorized people enter the lane, LED light turns red. Unauthorized people should exit the lane.

4.3 Unauthorized people from both directions enter the flap barrier

If user A and user B are in lane's two sides at the same time and A gets authorization first, the two-way LED light will be red at this time; User B exits the passage, then user A side LED light turns green, the barrier open for A, after A passes, the gate closes. Then user B can be authorized, the gate opens on the direction of user B, user B side LED light turns green, and user B can pass at this time. After user B passes, the gate is closed again, waiting for the next authorization.

4.4 Unauthorized person enters flap barrier on the opposite direction

An unauthorized user enters the channel from the opposite direction, the sensor detects unauthorized user, the barrier is closed, and the unauthorized user exits the channel, the alarm status is cancelled, and the channel enters standby mode and waits for the next valid authorization.

5. Security function

The flap barrier effectively isolates unauthorized persons, and the infrared detection system effectively prevents trailing and following entering, lurking, and crossing in the opposite direction.

5.1 Status indicator

5.1.1 Two authorized status indicator lights are embedded on the top plate of each channel of the flap gate. The lights have three colors: Red (forbidden to pass), Green (Ready to pass) and Blue (Standby status)

5.2 Power-off handling

5.2.1 If the fire signal is received and the battery is activated, the barrier will open automatically; the power will be cut off, the gate opening function is convenient for evacuation.

5.2.2 In the event of a power failure, the battery is activated and the barrier will open automatically; the power failure opening function is realized.

5.3 Anti-following, anti-tailing

Flap barrier is equipped with infrared sensor system which can accurately detect users' position between the lane. If sensor detects unauthorized people following the tailing, the flap barrier can be quickly moved back according to customer requirements, to block unauthorized people out of the passage to prevent them entering and activate the alarm system.

6. Safety protection function

Anti-crash function, auto-open after power-off, emergency evacuation, anti-crash function.

7. Parameters

Housing material: SUS304 stainless steel

Housing size: 1200*300*980mm(L*W*H)

Power supply voltage: 220V-10%/50Hz

Output voltage: DC 24V

Working current: 5A (max. 10A)

Drive motor: DC brushless motor DC24V 30W/30K 2600RPM

Communication

interface: TTL232

Input interface: 2 gate opening signals, 1 fire signal, 1 alarm signal

Infrared

quantity: 5 pairs of infrared input

Alarm output: 1 alarm output / built-in buzzer alarm

Voice interface: 1 voice interface

Hardware protection: short circuit protection/reverse connection protection

Working environment: temperature -25°C - 75°C

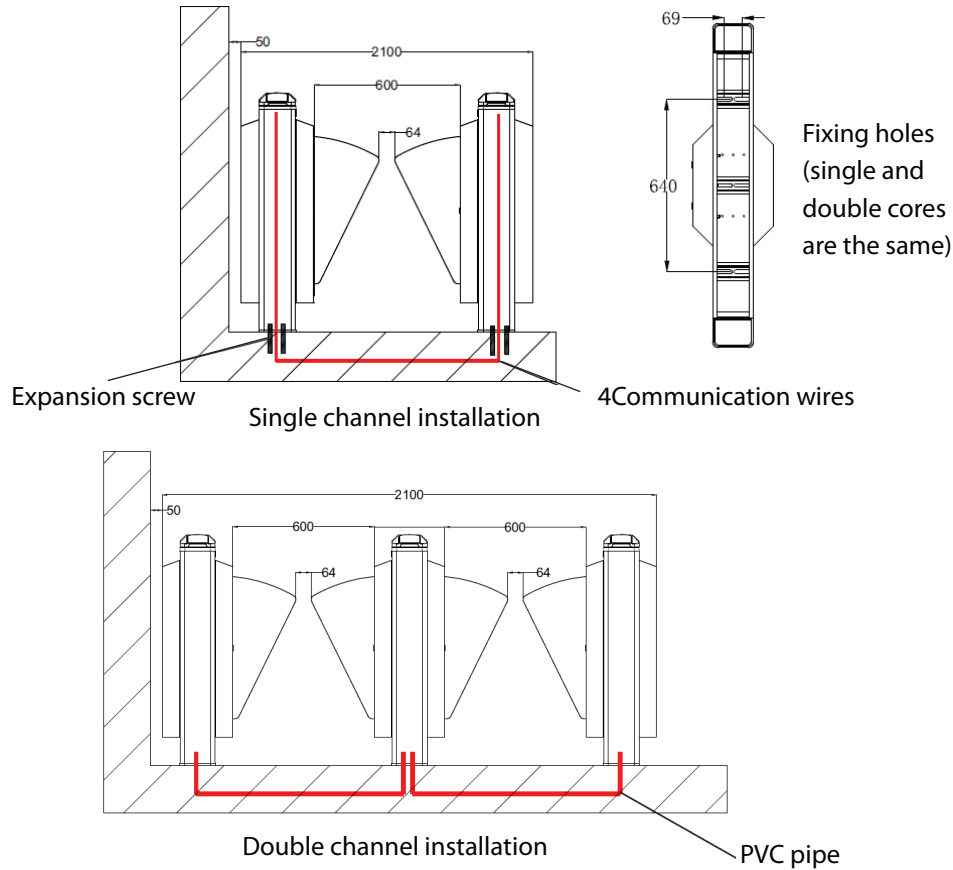
Passing speed: 40 ~ 60 people/min

Emergency measures: free passage after power failure

8. Install notes

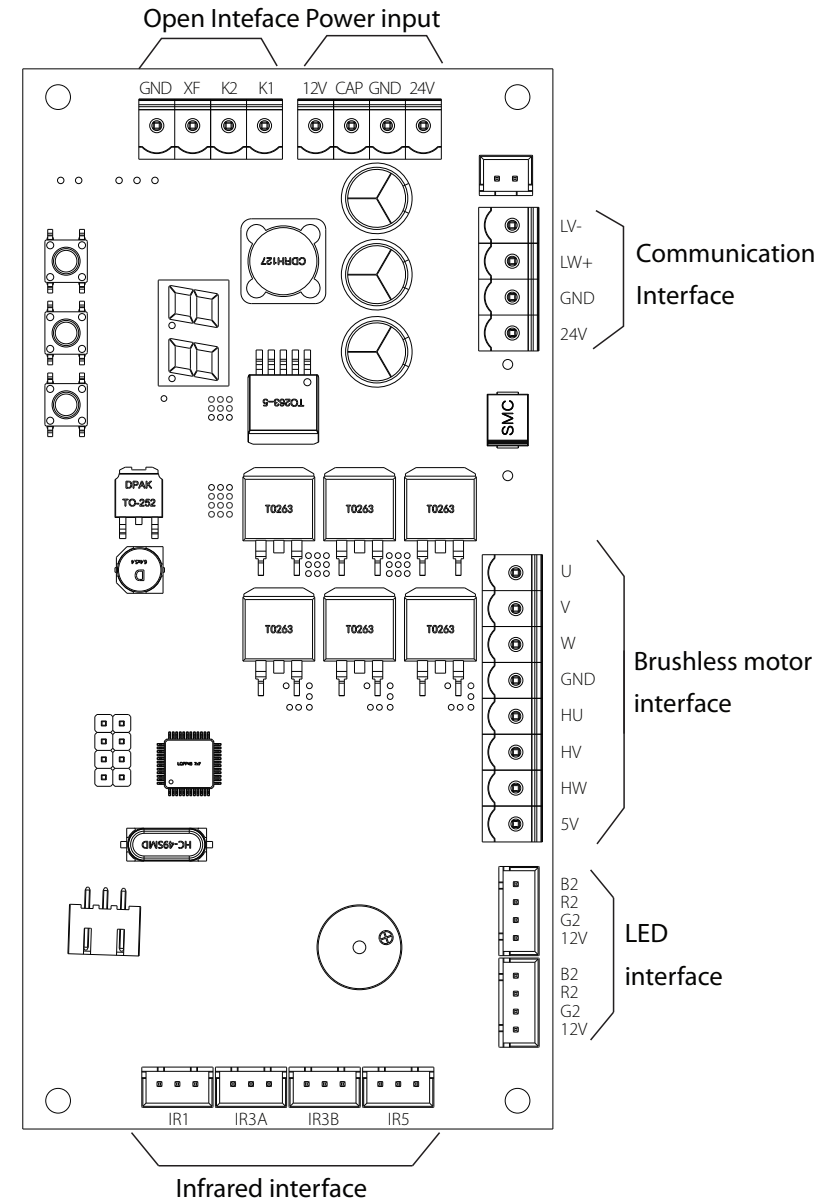
- 8.1 It is recommended to install the equipment on a flat ground to ensure smooth operation of the equipment
- 8.2 Ensure that the system is grounded reliably to prevent accidents
- 8.3 Reserve 100mm away from the building on the back of the chassis installation, which is convenient for opening the cover for debugging and maintenance.

9. Installation site (as show below)



Suggest: After installation, set a warning line for swiping card to avoid accidentally touch the sensor and cause an alarm!

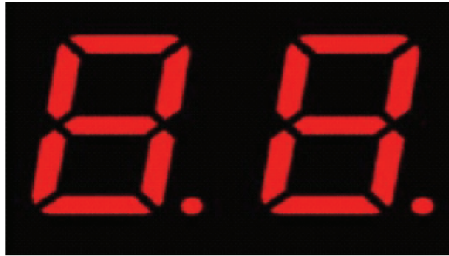
10. Wiring diagram



- ⚠ Notes: 10A power breaker is needed

11. Menu operation and function debugging

11.1 Setting board



Function

Minus

Plus

12. Operation Instructions

12.1 Press [Function] key for 3 seconds till LED display "00", press [Plus] or [Minus] key to select the menu.

12.2 Press [Function] to switch menus or parameters; The parameter display will flash. Press [Plus] or [Minus] key to modify parameters.

12.3 After setting, press [Function] key 1 second till LED shows "_ _" to save the parameters successfully.

12.4 Re-press the [Function] key 1 second till LED shows "- -" to exit the menu; The operation is valid within 3 minutes after power-on.

12.5 Parameter setting

Menu	Factory default	Parameter name	Function Description	Remark	
01	02	Gate address	02		

Menu	Factory default	Parameter name	Function Description	Remark
02	00	Gate type	00 Speed gate 01 Swing barrier 03 Flap barrier	
03	41	Motor type	High position: 1-9 Number of motor pole pairs Low position: 0 Motor forward rotation 1 Motor reverse rotation	
04	08		00 Motor Hall Adaptive 03 300 Line encoder 04 360 Line encoder 05 500 Line encoder 06 512 Line encoder 07 1000 Line encoder 08 1024 Line encoder 09 2048 Line encoder 10-90 Motor speed Ratio	
06	00	Infrared type	00 NPN Normally open 01 PNP Normally opet	
07	01	Indicator type	01 Normal mode 02 Flashing mode	
08	00	Test mode	reserved	
09	88	opening angle	00-99 Degrees	
10	03 (S)	Gate opening time	01-99 Second	
11	03 (5°)	Push to open angle		

Menu	Factory default	Parameter name	Function Description	Remark
12	02(S)	Push lock time		
13	10(%)	Locking		
14	02(s)	Locking time		
15	10	Lock current		
20	10	Motor starting speed		
21	50(rpm)	Opening speed		
22	3	Opening acceleration time		
23	55	Opening deceleration angle		
24	00	Gate full opening angle		
25	10	Gate full opening speed		
26	00	Gate full opening speed		
27	00	Closing speed		
28	15	Gate closing deceleration angle		
29	4	Gate full closing angle		
30	10	Gate full closing speed		
31	00	Minimum current limitation		
32	00	Minimum current limitation		
33	00	Mainboard parameter 2		
34	10	Mainboard parameter 3		
35	15	Minimum motor speed		

Menu	Factory default	Parameter name	Function Description	Remark
36	15	Power-off opening speed		
39	15	Homing offset angle		
40	00	Gate opening mode	High position: 0 Reverse controlled 1 Reverse free 2 Reverse prohibition Low position: 0 Positive controlled 1 Positive free 2 Positive prohibition	
41	00	Opening gate memory	00 No memory 01 Opening gate memory mode 02 IR3 memory mode 03 Ir5 memory mode For flap barrier For swing barrier	
42	02	Intrusion opening control	00 Intrusion opening is allowed 01 Intrusion opening is prohibited 02 Positive side intrusion allowed, opposite side intrusion prohibited	
43	01	Intrusion alarm control	00 Intrusion allowed 01 Intrusion alarm 02 Intrusion IR3 alarm	
44	01	Opposite side intrusion control	00 Intrusion opening gate 01 Intrusion closing gate 02 Intrusion forced closing gate 03 Intrusion closing gate reopened	
45	01	Trailing alarm control	00 Trailing allowed gate 01 Trailing alarm mode 1 02 Trailing alarm mode 2 03 Trailing alarm mode 3	
46	00	Infrared anti-pinch model	00 Anti-pinch stop 10 Anti-pinch open 20 Anti-pinch open and delay 1-9s to Close the gate	

Menu	Factory default	Parameter name	Function Description	Remark
47	00	Current anti-pinch model	00 Anti-pinch stop 01 Anti-pinch open 02-09 Anti-pinch open and delay 2-9s to Close the gate	
50	04	Baud rate setting model	01 1200 02 2400 03 4800 04 9600 05 19200 06 38400 07 57600 08 115200	
51	02	Protocol	00 serial port closed 08 standard protocol 09 Active Upload Protocol	
52	reserved	reserved	reserved	
53	01	Buzzer	00 Buzzer close 01 Buzzer open	
55	00	reset zero	00 Gate reset zero 99 Clear Gate Zero	
99	XX	Factory settings	00 Save can restore factory default XXDisplay software version	

12.6 Status information

Code	Description
"----"	Normal display
" 1"	Power-on display: turnstile address 1 stand-alone mode
" 01"	Power-on display: turnstile address 1 master&slaver successfully connected
" 2"	Power-on display: turnstile address 1 stand-alone mode
" 02"	Power-on display: turnstile address 1 master&slaver successfully connected

12.7 Error code

Code	Description
"E1"	Motor failure
"E2"	Encoder failure
"E3"	Infrared failure
"E4"	Low-voltagr fault
"E5"	Over current failures

12.8 Packing list

No.	Name	Unit	Quantity	No.	Name	Unit	Quantity
1	Turnstile	pcs	1	4	Expansion screw	pcs	6
2	Certificate	pcs	1	5	Sync key	pcs	1
3	BP-FB313	pcs	1	6	key	pcs	2

13. Product maintenance

13.1 Maintenance

The housing of flap barrier is made of 304 stainless steel and is integrally stamped and formed. External reasons may cause scratches and rust spots on the surface. Use sandpaper and green gauze or putty powder to clean the chassis, and wipe along the long lines during sanding to avoid damage, the surface can be coated with anti-rust oil.

Always use a soft fabric to wipe off the dust and oil on the surface of the chassis to keep it clean.

Regularly check the wiring of the control board whether there are looseness, poor contact, etc., and keep the control equipment in a ventilated and dry place. Do not wash or soak in water to ensure the stability of its performance and increase the service life of the product.

Regularly check the connection of the connecting parts and moving parts of the housing, and tighten the loose fasteners.

Regularly check the reducer motor for oil leakage and other defects.

Regularly check whether the infrared pair radio eye is clean, and clean it regularly to avoid triggering false alarms.

Regularly check the connection of the system protection ground to ensure that the system protection ground contact is reliable.

Remark: Must cut off the power before housing care.

Maintenance and Care should be done by professional stuffs.

13.2 Service term of after-sale

From the date of purchase, under normal use, if the product has quality problems, the whole machine will be guaranteed for free within one year.

13.2.1 Warranty service: If there is a quality problem with the product during the warranty period, the user can go to the local after-sales service center to enjoy the warranty service.

13.2.2 Maintenance service: For products outside the warranty period or subject to exclusions, if there is a quality problem, the user can go to the local after-sales service center or entrust a dealer to request maintenance service.

13.2.3 The following situations are not covered by the free warranty.

A .The user does not install and use in accordance with the instructions, causing damage to the product.

B. The power supply is unstable, exceeds the specified range of the product, or does not meet the national safety power standard, which causes the product to be damaged.

C. The product is damaged due to irresistible factors such as natural disasters.

D. It has been repaired and modified by a service unit or individual not authorized by the company.

E. The appearance is damaged due to improper use by the user.

Warranty card

Client`s name		Telephone	
Client`s address			
Purchase date		Product number	
<p>1. This card must be completed and it will take effect after being stamped with the seller`s seal.</p> <p>2. This product is guaranteed for free within one year, and only the material fee will be charged for lifetime maintenanceafter the warranty period.</p> <p>3. Use in violation of this product manual or disassemble the machine by yourself is not covered by the warranty.</p>			



Statement

1. Due to product improvements/changes, the contents of the manual may be changed without notice.