Automatic Supermarket Swing Gate

0513 V2
Technical Specifications

1. The Bulwark Automatic Gate is designed for Indoor Use Only.
2. Operating environment 10 to 50 degrees C
3. Supply voltage 220-240VAC
4. Power 30VA
5. Built In Radar with Sensitivity Control.
6. Selectable Auto Close Time 1 to 8 seconds
7. Auto Stop Function if Arm is forced.
8. 24VDC Power Supply with:
   - Short circuit protection and auto reset.
   - Overvoltage / under voltage protection.
   - Over temperature protection.
9. LED Indicators on control panel.
   - LD1 – Radar Trigger
   - LD2 – Gate Closed status
   - LD3 – Gate Open status
   - LD4 – Alarm / Obstruction / Tamper / Forced
10. Dual Gate Interface (Plug M2)
11. External Push Button or Photoelectric beam Control (Plug M2)
12. Additional radar (Plug Y1)

Main Control Board

There are 3 PC boards in this model,

1. The radar which is inside the plastic dome cover
2. The encoder board which is in the top of the pedestal
3. The main control panel which is in the bottom of the pedestal
Installation

The gate requires a single phase 240VAC supply (30VA) wired to Australian Standards AS/NZ 3000. All cabling and connections should be performed by a qualified and licensed electrician. Cable entry is through the 35mm opening in the centre of the base. The gate should be mounted on a flat solid surface using fixings designed and specified for the purpose (shielded anchor, chemical fixings etc.) and mounted to ensure stability and safety.

The gates are available in left and right hand opening – ensure the correct gate is installed for your requirements. They cannot be converted from right hand to left hand and vice versa.

Ensure the cables are passed through the base plate before fixing the gate to the floor. Before mounting the gate permanently to the floor – power the gate and ensure a correct initial position – normally 90 degrees to the approach direction. The holes in the base are slotted to allow for adjustment.

The gate can be operated with a variety of different triggers – push button, photoelectric beam, and radar (included).

Setting the Radar

The radar module is located inside the dome lid of the gate pedestal. Sensitivity (range) is adjusted by the potentiometer mounted on the radar module. The Radar scans in 3 dimensions with coverage distance range from 0.5 to 3.0 metres. When adjusting the radar allow for objects in the proximity of the gate - automatic doors, checkouts, trolley bays etc. Movement in these areas may cause false triggering.

Fitting the Arm

The arm is a tubular hollow section which fits onto two spigots. The length of the arm may be cut to suit – if this is the case new 8.5mm holes will need to be drilled in the underside of the arm to allow the screws to be fitted.

Adjusting the Gate Parameters

Once the trigger device is connected (or the radar set) the auto close timer should be set. This is set using the three DIP switches located on the main control board (lower section of the pedestal). The DIP switches under the dome lid are not used on this gate model. There are three switches. Each switch corresponds to a time period.

Default (all off) – 1 second.
Switch 1 ON – 2 seconds.
Switch 2 ON – 3 seconds.
Switch 3 ON – 4 seconds.
Switch 1 and 3 ON – 6 seconds.
Switch 1,2 and 3 ON – 9 seconds.

4 second auto close time is usual for Supermarkets and 2 seconds is normal for bottle shops, gymnasiums etc.

Operation

In normal operation no supervision of the gate is required. The gate has collision safety and tamper alarms built into the mechanism. In the event that a gate arm is in operation and contacts an object the arm will stop, pause, and then attempt to either open or close depending on the direction of collision.
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Fixing: 3 off 12 x 75 Sleeve Anchor or similar

Power: 240VAC single phase 5amp cable entry through centre of base

Radar installed inside dome cover.