



ON-ESCSG

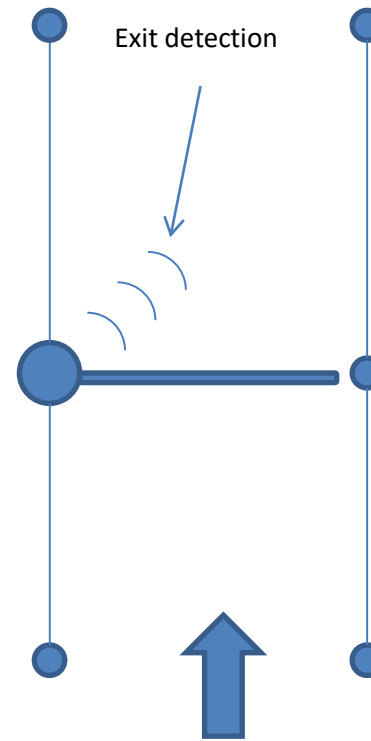
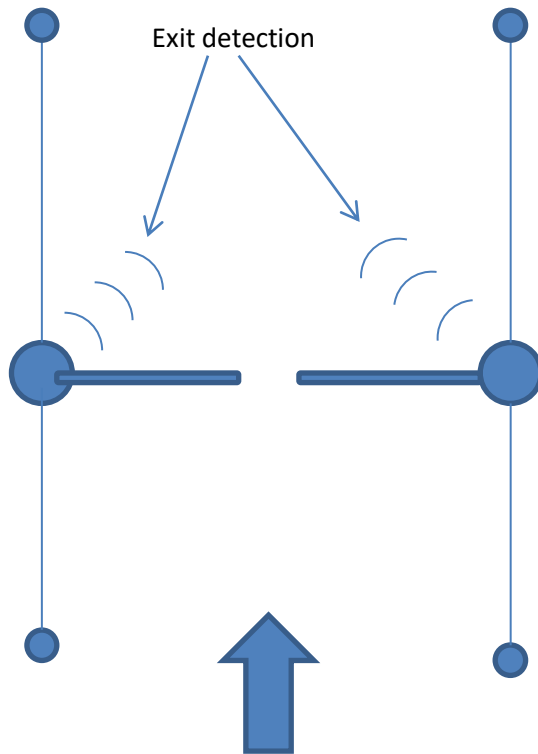
Electric Self-Closing Swing Gate

INSTALLATION GUIDE

V 2020

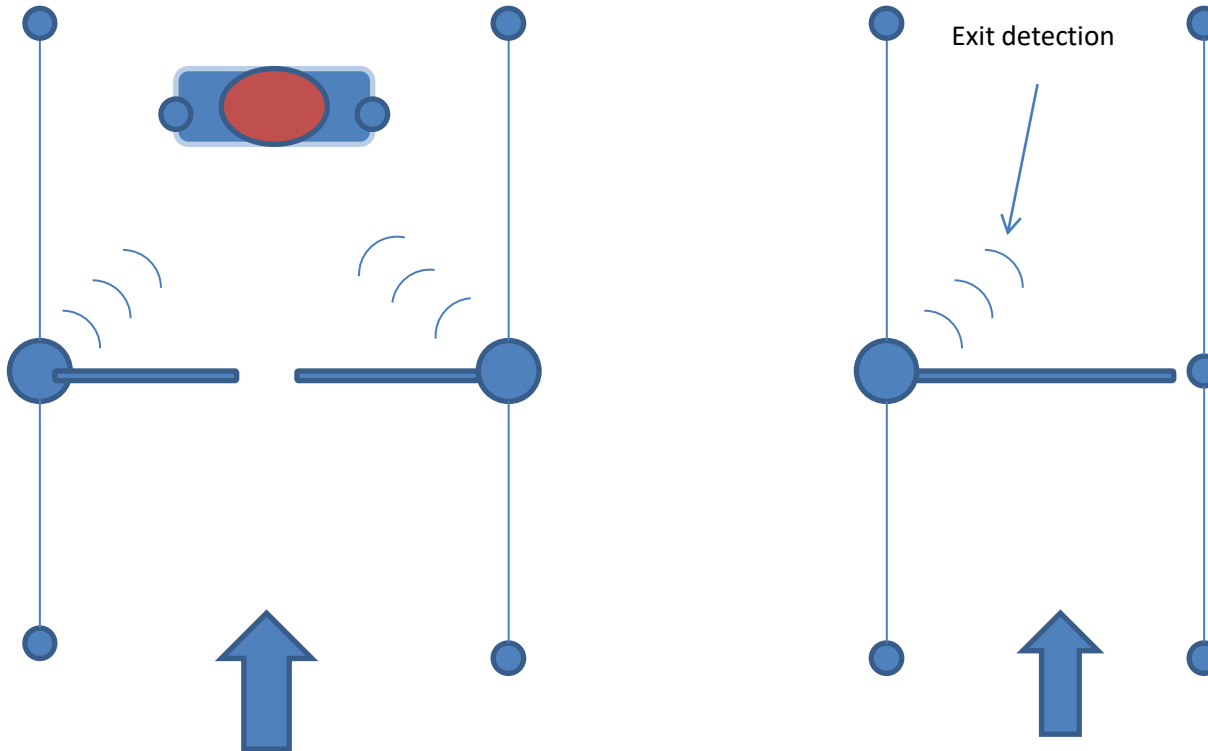
Below are the two main typical layouts you will find in a Store front

The first example shows a double gate system, the second a single. For these examples, the arrow indicates the entrance direction. Also shown is the exit sensor range detection. (If applicable)



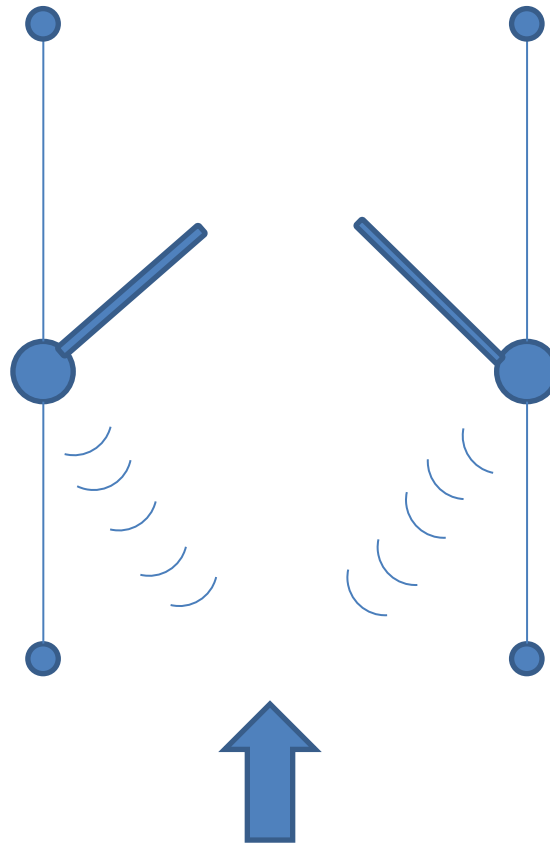
Exit detection explained:

The main function of the Exit detection is to sound an alarm and lock when a pedestrian is trying to Exit trough the gate system.



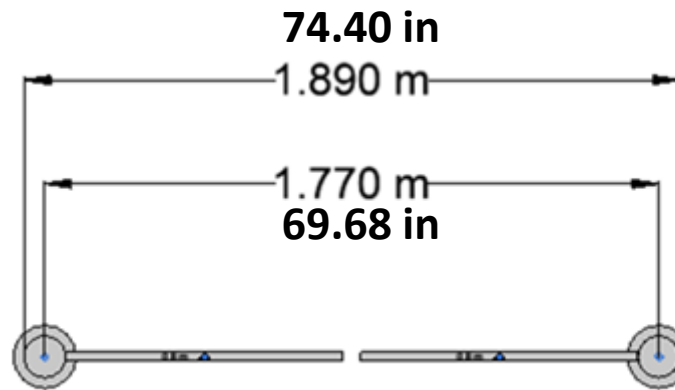
Entrance side, Explained

Likewise for the entrance side, however the factory settings on the sensors are set higher to reach a much longer and broader range of movement. To accommodate for shopping carts and speed of movement. (which may need to be adjusted in the field)

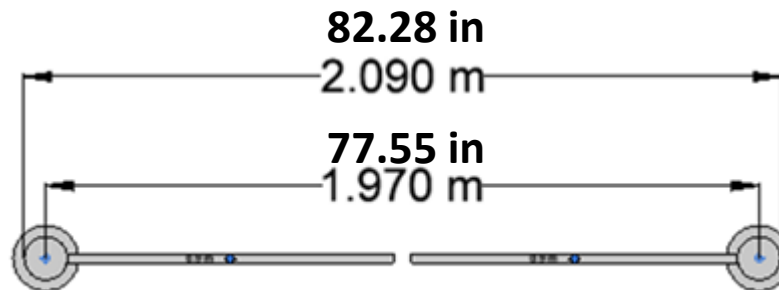


Installation

First off, some gates will come **800** mm arms others will have **900** mm arms. Here are the layouts for the centre to centre dimensions for each sizes. This measurement will be critical for the laying out of the conduit ahead of installation. If you are not using conduit, you will want to centre your gates on a grout line.



Note: the gates require a communication cable between them



Removing the power cable

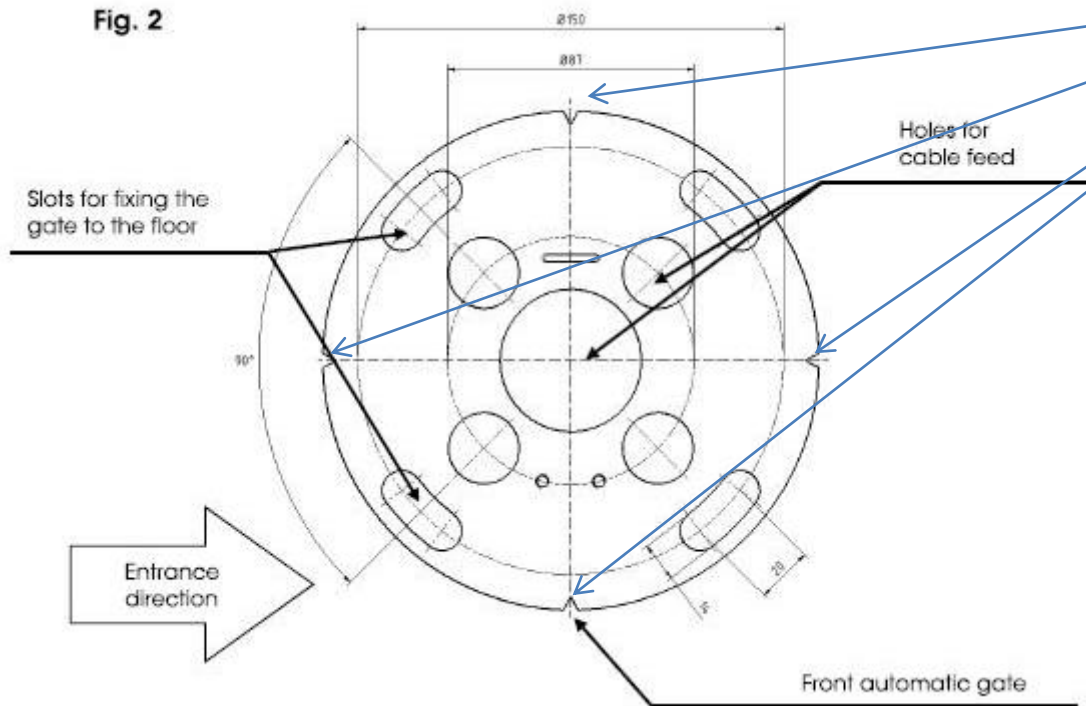
Should you be working on a job without conduit: You will need to remove the power cable fitting and strain relief from the base of the gate to lift the flange cover up to have access to the base plate.



Then remove the power cable from the control board inside the gate post.



1. Find location in store where the gates are to be Installed.
2. Chalk a line across the floor using a chalk line (making sure to make extra long for layout)
3. Layout and mark centre marks (Based on dimensions) where you want the gates to go.
4. Place the gates on the centre floor markings and with pencil or erasable marker. Mark the mount holes on the gate flange.



Note: Notice the cut out in the flange. These are made specifically for lining up the gate on the floor. Every 90 %

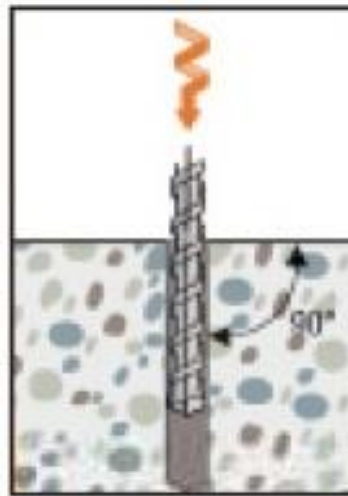
Anchoring

In most orders you will receive 3/8" x 2-3/8" wedge anchors with your order.

With a hammer drill, drill the holes that you have marked out on the previous section.

Vacuum and remove any existing debris from around or inside the holes and mount the anchors as shown in this diagram.

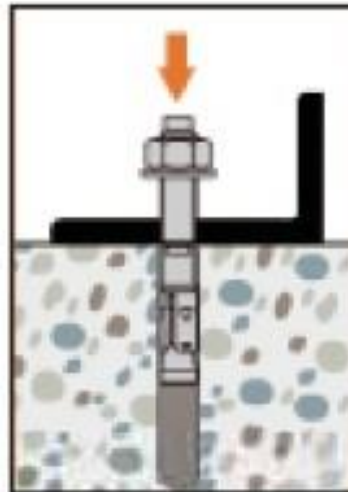
Note: It may be necessary to only mount the gates first and then continue on with installing the rest of the railing system as per store plans and or layouts provided on site.



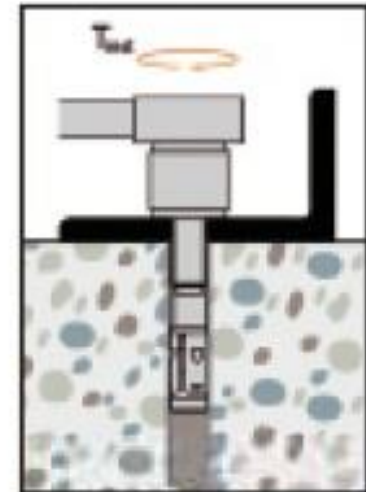
1. Drill hole



2. Clean hole (blowing)



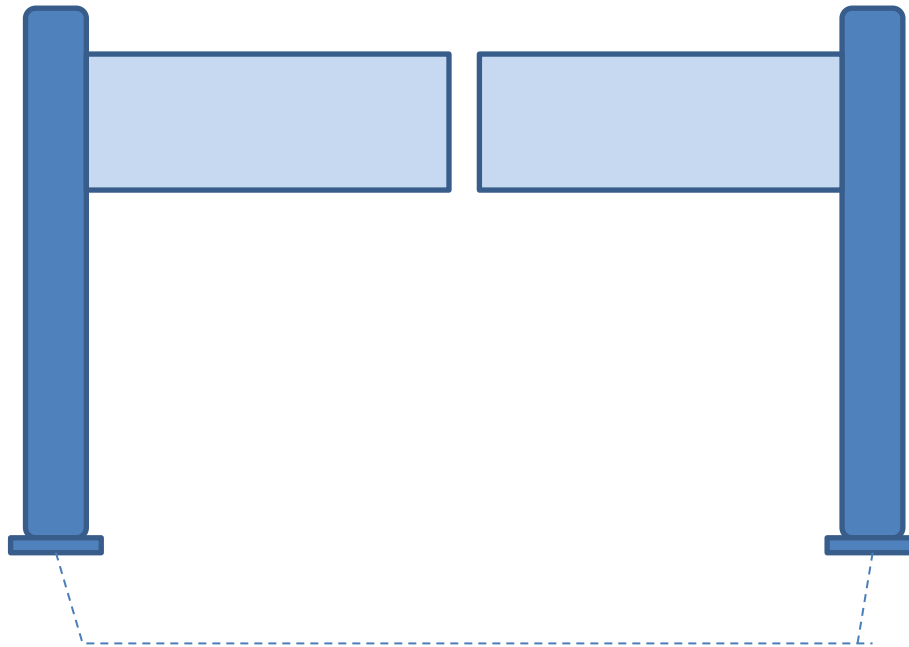
3. Insert anchor through fixture



4. Apply recommended fastening torque with a calibrated torque-wrench

Once gates are mounted (for dual gate application only)

Once you have the gates are in place, you will have to connect the gates together via a 2 wire communication cable. That will need to be connected between both gates via conduit or by cutting a grout line seem in the floor.



Grinding between the gates

Having layedout your gates over a grout line. Cut out the grout approximately $\frac{1}{2}$ " deep into the floor surface.

Approximately $\frac{3}{16}$ " to $\frac{1}{4}$ " wide.

Allowing enough room for the wire lay flat down inside the crevasse while leaving enough room for new grout to be re-surfaced over top of the wire.

This is to ensure the wire does not get damaged through regular wear and tear.

Note: while you are doing this, you will have to remove the gates, to make sure the line you are cutting reaches the center of the posts on either side.



Re- assembling the power the power cable

Once you have completed cutting the grout line and placing the communication wire across the crevasse, You will need to re-mount the gates to the floor, tighten level, then re- connect the power cable/ fitting and strain relief.



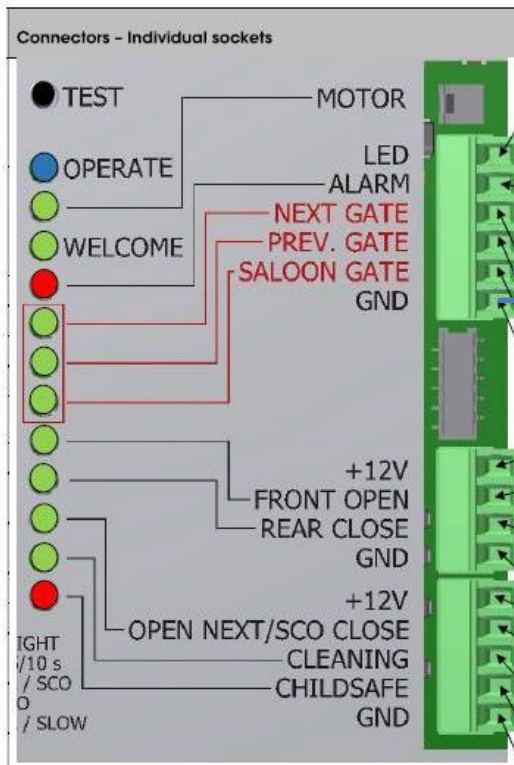
Then re-connect the power cable from the control board inside the gate post.



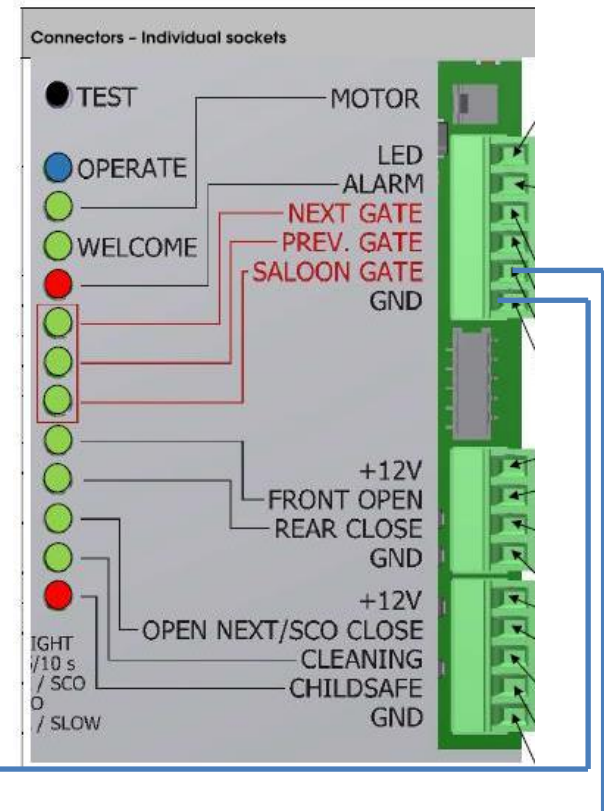
Connecting the communication cable

Now we need to connect the communication cable (18 gauge 2 wire) from the Master gate control board to the slave. (In all cases, the R.H. gate will always be the master)

L.H Gate (Slave)



R.H. Gate (master)



In every order, an 18 Gauge 2 wire will be provided.

Power on and testing

Apply power to the circuit that will be powering the gates.

With the keys , turn on both gates to the '**on**' position of the key switch

Testing:

Once the gates are powered up, you will want to test the approach sensors and the detection sensors.

For approach, you will want to approach the sensors at a normal walking pace.

(with a shopping cart when applicable)

You will want the gate to start to open at about 4-5 feet from the gate arm

For the detection side, you will want to be approximately 2-3 feet away.



Adjusting the sensors

If you notice that the gate needs to open sooner or later than it currently does, you will need to open the top.

Remove the 3 screws holding the top cap in place.

Remove the plastic sensor lense and reveal the sensors.

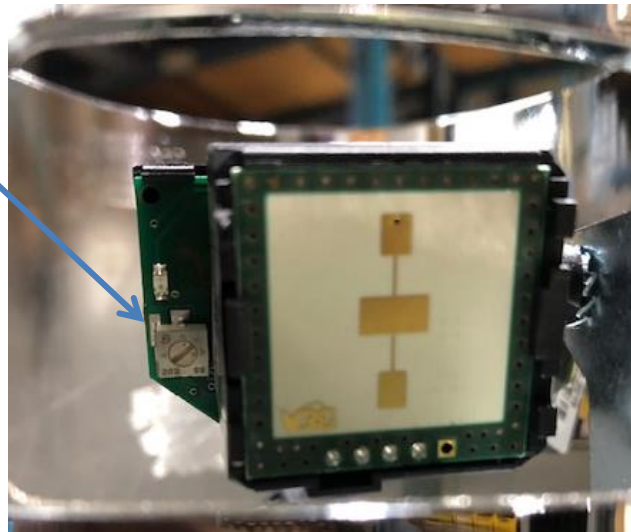
With a small straight screw driver. Turn the range detector dial of the sensor up or down.

Note: Turn the dial clockwise for a longer range.

Or Counter Clockwise for shorter range.



Remove screws



Making Adjustments

While the factory settings of the gate should prove to be set appropriately.

In some cases, the need to increase the gates panic force function.

Gate panic force will change from region to region based on their own specifics.

Normal set up is 15 lbs or 66 Newtons of pressure to breakaway the gate system.

Potentiometer	Colour	Function	Time	Description
	Black	NORMAL OPENING	0 to 10 s	DELAY: Adjusts the time opening delay when gate has being triggered to open.
		SCO FUNCTION CLOSE	0 to 8 s	SCO: Adjusts the time until the gate closes after receiving a closing signal from the PEC (local photocell).
	Red	CHILDSAFE	0 to 10 s	Adjusts the delay time to cut the power to the motor after receiving a signal from the chilsafe sensor. This enables customers to walk through the chilsafe sensors coverage area without triggering the chilsafe.
	Red	NORMAL SECURE	2 to 10 s	Adjusts the delay time of the gate to be operational after the SECURE sensor has stopped triggering.
		SCO-gate: ULTIMATE TIME-OUT	0 to 32 s	SCO: Adjusts the ultimate time out for the gate to close if no signal has been received from the local photocell (PEC) to close.
	Black	PANIC FORCE	40-60 Nm	Adjusts the brake out force. * ⚠ (see below)

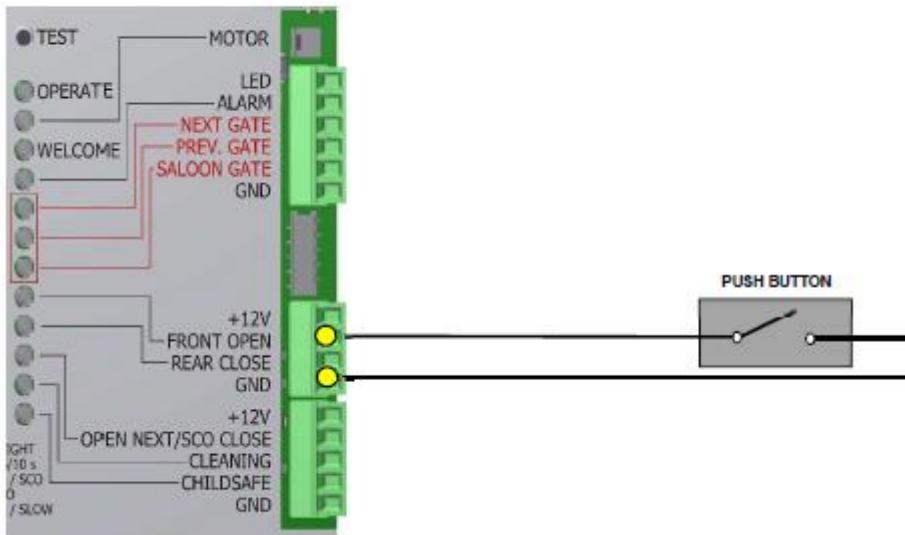
Potentiometers

If turned anti clock wise = decrease, min-value
If turned clock wise = increase, max-value



* NOTE: The brake out force is dependent of the length of the gate arm.

Push Buttons and remote push buttons

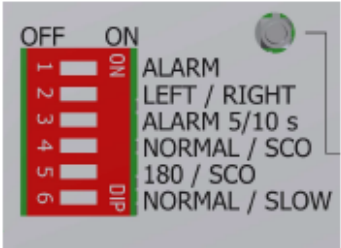


Note: Adding push buttons is good for access for employees, however connecting this accessory will cancel out the ability to have an active 'Exit Sensor'

Interface – Dip switches

Table below shows different functions to be set by dip switches.

Table 1

DIP SWITCH	Nr	Function	Switch OFF	Switch ON
	1	Alarm	OFF	ON
	2	Direction	LEFT	RIGHT
	3	Alarm time (5 s/10 s)	5 sec	10 sec
	4	Gate set up	NORMAL	SCO*
	5	180° opening	OFF	ON / SCO*
	6	Speed of gate arm	NORMAL	SLOW

* To achieve SCO mode, dip switch 4 AND 5 must be set to ON (right position).

6.4 NORMAL & SLOW SPEED DIP SWITCH SETTINGS

(FOR CONTROLLING THE GATE ARM SPEED)

The kinetic energy of an object (in this case a gate arm) is dependent upon the weight and the speed of the object. To reduce the kinetic energy of the Alphagate MKII the DIP switch no. 6 can be set to SLOW.

As the safety of an automatic gate is of great concern, the dip switch settings must be complied with to ensure continued safety.

Recommended settings for dip switch no. 6:

NORMAL - Standard gate arms shorter than 900 mm and gate arms with a weight less than 3,5 kg.

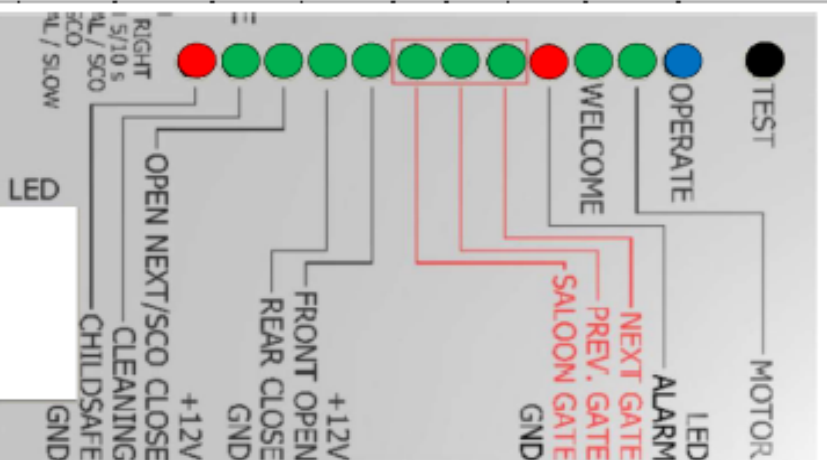
SLOW - Deep gate arms, long standard gate arms (> 900 mm) or gate arms heavier than 3,5 kg.

User Interface – LED Diodes

LED diodes general:

- > **Steady light** = Everything OK.
- > **Blinking light** = Malfunction. There is a fault in the system (it is normal for the light to blink every time the function of the light is triggered).
- > **No light** = Function disabled.

LED light+ Test button	Colour	Function	Description
	Black button	TEST	Push the button to test the gate when powered up.
	Blue	OPERATE	Indicates power to the gate with the motor enabled. When the diode flashes the key switch is OFF or out of function.
		LED	2 s signal in SCO mode for scanner LED diode.
	Green	MOTOR	Indicates power to the motor to open/close.
	Green	WELCOME	Indicates Welcome mode.
	Red	ALARM	Indicates alarm.
	Green	NEXT GATE	Indicates communication to the Next Gate.
	Green	PREVIOUS GATE	Indicates communication to the Previous Gate.
	Green	SALOON GATE	Indicates communication to the Saloon Gate.
	Green	FRONT OPEN	Indicates received opening signal.
	Green	REAR CLOSE	Indicates received closing signal.
	Green	OPEN NEXT/SCO CLOSE	Indicates received closing signal for the Next Gate or closing signal for SCO gate.
	Green	CLEANING	Indicates cleaning mode of the gate.
	Red	CHILDSAFE	Indicates received signal from CHILDSAFE sensor.



Gate arm alignment

Should you find that even after making sure everything was lined up correctly, that the gate arm is still not lined up. Use the below instructions to straighten the gate arm.

If the gate arm needs to be adjusted, loosen the screw that holds the coulisse and move the coulisse a little bit to the left or to the right depending on how the gate arm needs to be adjusted. Move carefully, small movements is enough to adjust the gate arm several centimetres. When the gate arm is satisfactory adjusted, fasten the screw again. To be able to do this adjustment, the power needs to be switched on to the gate. Make sure no sensors are connected during this setup, it may break the coulisse!

Move to the right → gate arm moves to the left

Move to the left → gate arm moves to the right

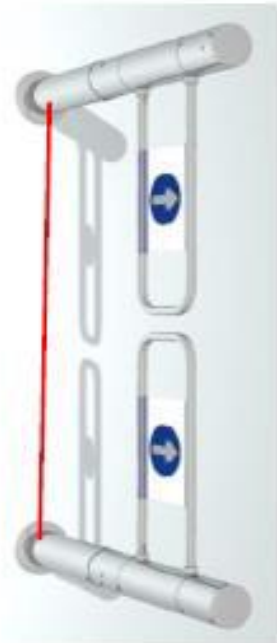


Make sure no sensors are connected during this setup.

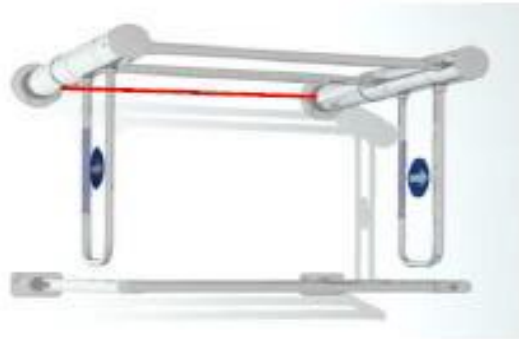


Various Configurations:

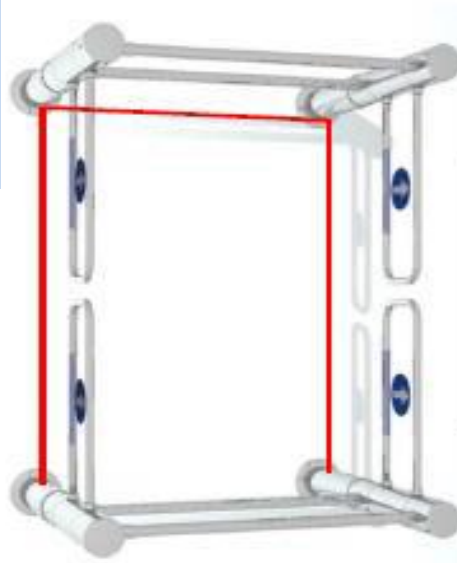
The proper “communication” cabling method for each scenario.



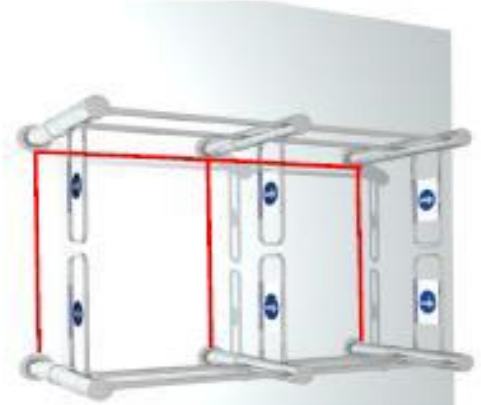
I-Configuration



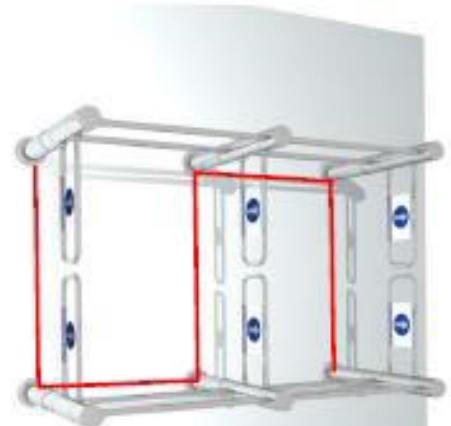
I-Configuration



C-Configuration



E-Configuration



S-Configuration