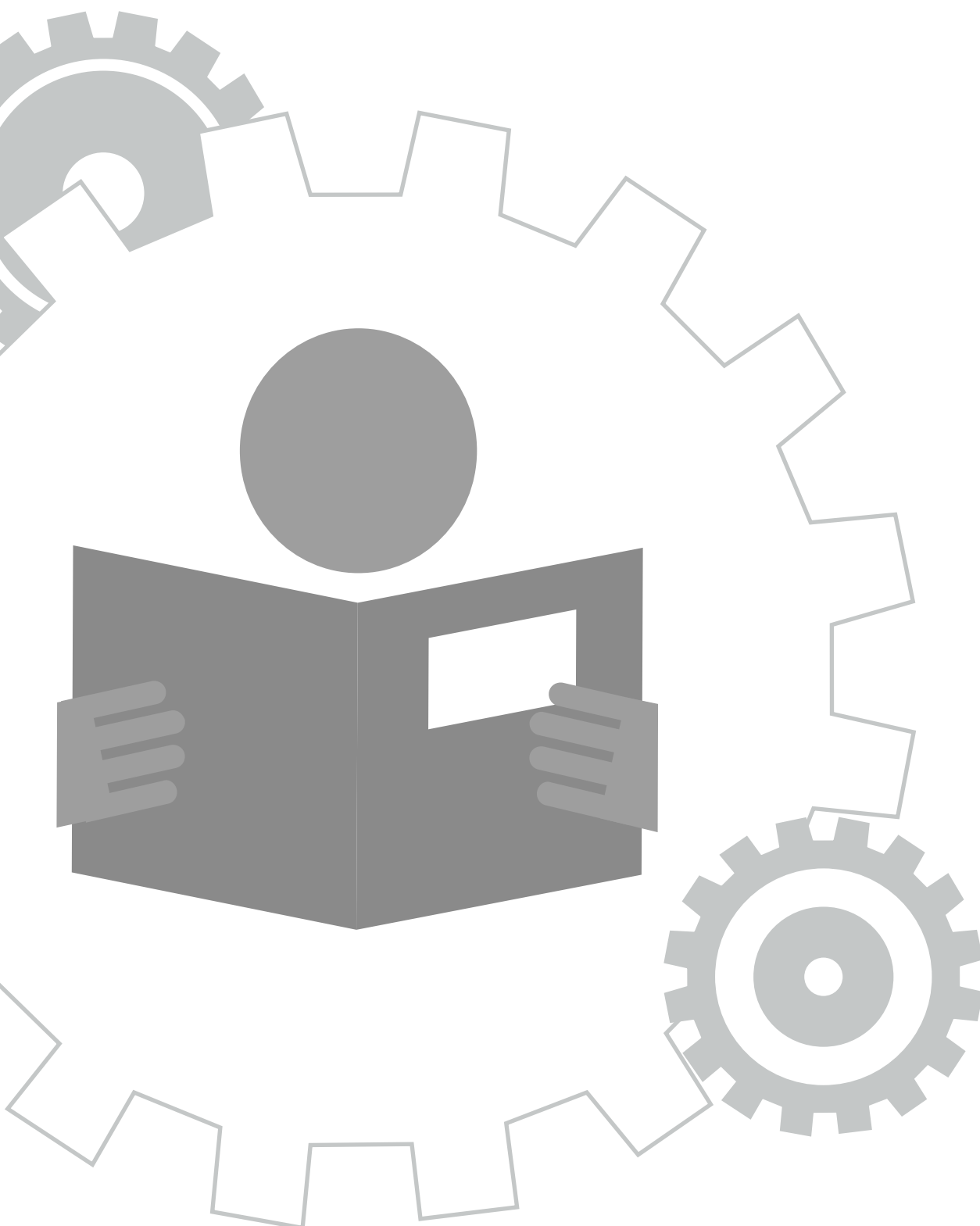


record Speedgate flap



Translation of the original manual

User manual

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1 Safety

1.1 Presentation of warning signs

Various symbols are used in this guide for easier understanding:



NOTICE

Useful advice and information to ensure correct and efficient workflow of the system.



IMPORTANT

Specific details which are essential for trouble-free operation of the system.



IMPORTANT

Important details which must be read for proper function of the system.



CAUTION

Against a potential hazardous situation that can lead to minor personal injury and property damage.



WARNING

Against a latent hazardous situation that can lead to severe injuries or death and cause substantial property damage.



DANGER

Against an imminent hazardous situation that can lead to severe injury or death.



DANGER

Against an imminent or latent hazardous situation that could lead to electric shock and cause serious injury or death.

1.2 Intended purpose of use

The system is designed exclusively for use as a pedestrian passage. The installation may only occur in dry areas. If there are deviations then proper waterproofing and water drains will be required on-site.

Any other application or use beyond this purpose is not considered to be an intended purpose. The manufacturer bears no liability for any resulting damage; the operator alone shall bear the associated risk.

The intended purpose also includes observation of the operating conditions specified by the manufacturer, in addition to regular care, maintenance and repair.

Interventions in or alterations to the installation performed by non-authorized maintenance technicians exclude the manufacturer's liability for consequential damages.

1.3 General hazards

The following section lists hazards that can be caused by the system even when used as intended.

To reduce the risk of malfunction, damage to property or injury to persons and to avoid dangerous situations, the safety instructions listed here must be observed.

The specific safety instructions in the other sections of this manual must also be observed.



IMPORTANT

The country-specific regulations must be observed and complied with!



IMPORTANT

To avoid malfunctions, moving objects such as flags or parts of plants must not be allowed to enter the detection range of the sensors.



CAUTION

Risk of malfunctions, material damage or injury due to improper settings!

- a) Improper settings can lead to malfunctions, material damage or personal injury.
 - ⇒ Do not disconnect the system from the power supply overnight.
 - ⇒ Settings should only be made by personnel qualified to do so.
 - ⇒ Do not disassemble, put out of operation or manipulate safety devices.
 - ⇒ Have faults rectified by specialist personnel or by personnel qualified to do so.
 - ⇒ Have service and maintenance carried out according to locally applicable regulations or according to a maintenance contract.



CAUTION

Risk of malfunctions, material damage or injuries due to insufficient or missing cleaning or care!

- a) Insufficient or inattentive cleaning or care of the system can lead to malfunctions, damage to property or injury to persons.
 - ⇒ Check the sensors regularly for dirt and clean them if necessary.
 - ⇒ Regularly remove dirt accumulations in the floor rail or under the floor mat.
 - ⇒ Keep the system free of snow and ice.
 - ⇒ Do not use aggressive or caustic cleaning agents.
 - ⇒ Use road salt or loose chippings only conditionally.
 - ⇒ Lay the floor mat without folds and flush with the floor.
 - ⇒ Equipment required for cleaning purposes such as ladders or similar must not be leaned on or attached to the system.



CAUTION

Risk of material damage or injury due to unforeseen opening, closing or turning of the door!

- a) The door can open, close or turn unexpectedly. This may result in damage to property or injury to persons.
 - ⇒ No persons may be present in the opening area of the system.
 - ⇒ Ensure that moving objects such as flags or parts of plants do not enter the detection range of the sensors.
 - ⇒ Do not make any settings on the control unit when the system is in use.
 - ⇒ Have faults rectified immediately by specialist or personnel qualified to do so.
 - ⇒ Remove objects from the opening area.
 - ⇒ Do not disassemble, put out of operation or manipulate safety devices.
 - ⇒ Do not rush through a closing system.



CAUTION

Risk of bruising and severing of limbs!

- a) If the system moves, careless behaviour can lead to serious injuries to limbs or severance of limbs.
 - ⇒ Do not reach in when parts of the system are moving.
 - ⇒ Keep a distance when parts of the system move.
 - ⇒ Do not bump into or touch the system when it is moving.
 - ⇒ Do not open or remove protective covers during operation.
 - ⇒ Do not permanently remove covers from the system.
 - ⇒ Only carry out inspection, service, maintenance and cleaning when the system is stationary and switched off.



CAUTION

Danger of material damage or injury due to non-functioning safety devices!

- a) If safety devices are not functioning, manipulated or put out of operation, there is a risk of damage to property or injuries that can lead to death.
 - ⇒ Never disable or manipulate safety devices.
 - ⇒ Have inspection, service and maintenance of the safety devices carried out according to local regulations or according to a maintenance contract.



CAUTION

Danger of malfunctions, damage to property or risk of injury if used by unauthorised persons!

- a) If unauthorised persons use the system, there is a risk of malfunction, damage to property or injury to persons.
 - ⇒ Children under 8 years of age may only use the system under supervision.
 - ⇒ Children must not play with or on the system or clean and maintain it.
 - ⇒ Persons with limited physical, sensory or mental abilities as well as persons with insufficient knowledge or experience may only use the system under supervision or must have received and understood instructions to do so.



DANGER

Danger to life due to electric current!

- a) In case of contact with live parts, there is an immediate danger to life due to electric shock. Damage to or removal of the insulation or individual components can be life-threatening.
 - ⇒ Before starting work on active parts of electrical systems and equipment, ensure that all poles are voltage free and that this is maintained for the duration of the work.
 - ⇒ Keep moisture away from live parts. This can lead to a short circuit.
 - ⇒ Never bridge fuses or put them out of operation.
 - ⇒ Do not connect the power supply until all work has been completed.
 - ⇒ Have work on the electrical system performed by qualified personnel only.



DANGER

Danger to life due to non-functioning safety devices of the fire protection system!

- a) If safety devices of the fire protection system do not function properly, there is a risk of serious or fatal injuries.
 - ⇒ Never disconnect the fire protection system from the power supply overnight.
 - ⇒ Do not disassemble, put out of operation or manipulate safety devices.
 - ⇒ Do not remove safety instructions on the system.
 - ⇒ Never block, hold open or otherwise prevent fire doors from closing.
 - ⇒ Have inspection, service and maintenance of the fire protection system carried out in accordance with locally applicable regulations or according to a maintenance contract.
 - ⇒ Have the fire protection system checked and maintained according to the state of the art.

1.4 State of technology

This system was developed using state of the art technology and officially recognized technical safety regulations. The system, depending on its options and diameter, comply with the requirements of the Machine Guidelines 2006/42/EG as well as EN 16005 and DIN 18650 (D).

Nevertheless, danger may arise if not used as intended.



IMPORTANT

Installation, commissioning, inspection, maintenance and repair work may only be conducted by qualified, trained and authorized technicians.

After commissioning or repair work, fill in the check list and give it to the customer for safe keeping.

We recommend obtaining a service agreement.

1.5 Personal protective equipment

Personal protective equipment is used to protect persons from adverse effects on safety and health. Personnel must wear personal protective equipment during the various work activities on and with the system.

Personal protective equipment is explained below:



Hearing protection is used to protect the hearing from noise. As a rule of thumb, hearing protection is compulsory from when normal conversation with other people is no longer possible.



The head protection serves to protect against falling and flying parts and materials. It also protects the head from bumping into hard objects.



Protective goggles protect the eyes from flying parts, dust, splinters or splashes.



Protective gloves are designed to protect hands from friction, abrasions, punctures or serious injury and from burning caused by contacting hot surfaces.



Safety shoes protect the feet from crushing, falling parts and slipping on surfaces. The puncture resistance of the shoes ensures, that pointy objects do not penetrate the foot.



The high-visibility vest is used to make the personnel stand out and therefore to be seen. With improved visibility and attention, the high-visibility vest protects personnel in busy work areas from collisions with vehicles.

Depending on the place of work and the working environment, the protective equipment varies and must be adapted accordingly. In addition to protective equipment for specific work, the work site may require other protective equipment (for example a harness).

In hygiene-protected areas, special or additional requirements of personal protective equipment may be required. These requirements must be considered when choosing personal protective equipment. If there is any uncertainty regarding the choice of personal protective equipment, the safety officer must be consulted at the place of work.

1.6 Spare parts and liability

Reliable and trouble free operation of the door is only guaranteed when using parts that were recommended by the manufacturer. The manufacturer declines any liability for damages resulting from unauthorized modifications to the door or the use of parts that are not permitted.

2 General information

2 General information

2.1 Purpose and use of the instructions

These instructions are an integral part of the system and enable efficient and safe handling of the system. In order to ensure proper functioning, the instructions must be accessible at all times and kept in the immediate area of the system.

Although only the male form has been chosen for reasons of better legibility, the information refers to members of both sexes.

The operator must have read and understood the manual before starting any work. The basic requirement for safe working is to follow the safety instructions and the handling instructions. In addition, the local regulations and safety rules apply.

The manual can be handed over in extracts to instructed personnel who are familiar with the operation of the system.

The illustrations are for basic understanding and may differ from the actual presentation. Specific representations are contained in the drawings.

2.2 Copyright

The copyright of the instructions remain at:

agtatec ag

It is prohibited to reproduce, distribute or use the manuals for purpose of competition without the written authorization of agtatec ag.

Violation of the here stated copyrights will be prosecuted and fined with compensation of damage.

Differences between product and manual are thereby possible.

2.3 Product identification

The nameplate located on the door provides accurate identification of the product.

2.4 Document identification

Name:	BAL_Speedgate_flap_EN_1V0_REC_102-905401061
Version:	1.0
Article nr.:	102-905401061
Publication date:	01/2021

2.5 Manufacturer agtatec ag

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2.6 Target groups



CAUTION

Risk of injury if personnel are insufficiently qualified!

If unqualified personnel work on the system or are in the danger zone of the system, dangers may arise which can cause serious injuries and considerable damage to property.

- All work must be carried out by qualified personnel only.
- Keep unqualified personnel away from danger areas.

This operating manual is intended for the target groups listed below:

- Operating entity of the system:
the person who is responsible for the technical maintenance of this system
- Operator of the system:
the person who operates the system every day and has been suitably instructed

3 Description

3 Description

3.1 Units

- Speedgate Flap standard lane



Methods b and c will require optional interface cards COMR 1 or RS 485 at additional cost. Activation of the remote command or serial line command has priority over the setting made using the programmable parameter.

3.2 Passage Management

The command logic manages all of the system actions that allow a person to move through the passageway. The logic uses information from photocells to detect the presence and position of persons within the passageway area. In addition, it receives authorisation signals from the card readers and at the same time, provides the readers with activation and transit completed signals. It also controls and regulates movement of the mechanisms and effects all related acoustic and visual warnings.

3.3 Product description

The record Speedgate Flap Bi-Parting range is designed for applications of low profile, high flow rate whilst maintaining a high degree of security. The passageway is bi-directional. The two directions of transit A and B can be configured in the following three modes.

Mode	Description
Unlock Mode	All persons are allowed transit.
Lock Mode	Transit is forbidden
Reader Control Mode	Transit is only allowed for persons who have been given Authorisation by a badge reader

The operating mode for each direction of transit can be set via the following methods

- By remote control.
- By a command sent through the RS485 serial line
- Using programmable parameters: parameter 4.0. Control's direction A and parameter 4.1. direction B.(Refer to the appendix "Parameter Table" for reference)

4 Specifications

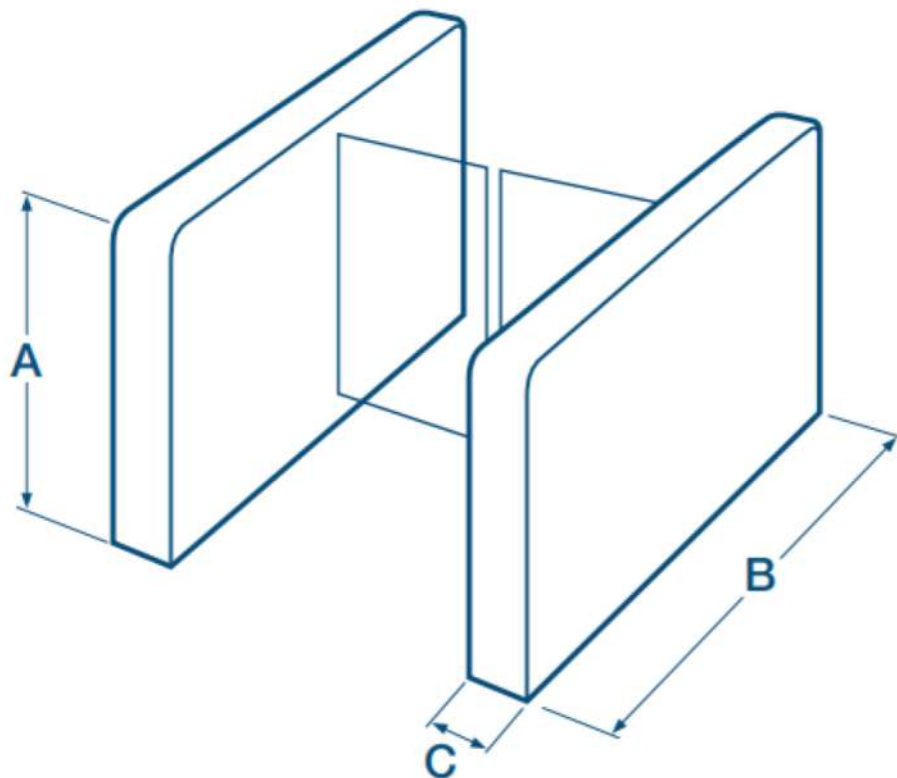
4.1 Technical specifications

Material	
Top	Painted Polyurethane / Stainless Steel
Front	Painted Polyurethane / Stainless Steel
Standard Finish	Metallic Grey, Cobalt Blue / Full Stainless Steel 304 grade
Wing Housing	Painted Steel / Stainless Steel finished to match Top and
Inlay	304 grade grained Stainless Steel
Wings	15mm clear Acrylic
Side Doors	Acrylic & Stainless Steel / 8.5mm 3 ply laminate safety glass
Drive	Motorised
Plinth	304 grade grained Stainless Steel
Operating Temperature	+5 to +40°C
Transportation and Storage	-25 to +55° C
IP Rating	IP20
Relative Humidity	95% Maximum without condensation.
Power Supply	115/230 Vac 50/60Hz
Power Consumption	300W max
Logic Voltage	24Vdc
Function	Passage in both directions is electronically controlled. The Speedgate is available in Normally Open (N/O) or Normally Closed (N/C) mode. The N/O cabinet can be configured to change to N/C mode via programmable parameter. (Pgeneral) or remote switching and the addition of the optional COMR1 interface card. It is not possible to convert from N/C to N/O. (Pgeneral) or remote switching and the addition of the optional COMR1 interface card. It is not possible to convert from N/C to N/O.
Mechanism	The wings are moved by two linked mechanical arms. The arms are rotated by a torque shaft connected to a drive unit. The drive unit is a DC motor connected to a reduction gear and a bi-directional encoder. A microprocessor control system guarantees the precise movement and positioning of the wings. The opening and closing speeds of the wings are adjustable A Safety photocell prevents the wings from closing on an obstruction. Should the normal wings operation be stopped by an obstruction, the controlling logic detects an abnormal conditions and activates a series of operations aimed at protecting the user.
Method of Operation	On receipt of a signal from the access control system, or push button, the wings will open. (Remain in open position for N/O set up) If an unauthorised person attempts to tailgate or tries to enter from the opposite direction, the system detects and closes the unauthorised passage and activates an alarm. Presence sensing is achieved with 6NO infrared sensors for the N/C version and 14NO for the N/O variant.
Power Failure	In the event where isolation of the power supply occurs, the wings remain in the current position. Battery Back Up is available as an optional extra to operate the wings to open in a power down scenario (Fail safe)

4 Specifications

Fire Alarm	An input facility is available for voltage free contact (supplied by Others) to open the walkway in the event of an emergency.
Location	Indoor, out of rain and water sprays, Speedgate Swing Advanced is not protected from dangerous effects of water penetration; non direct sun light; Not along escape routes or obstructing emergency exits, Do not use in potentially explosive atmospheres.
Interface	Potential free contact provided by either card reader or push button input. Card reader inhibit and reset output signals are available as standard. The unit has an adjustable time out facility if required, for example; a "Go" Signal will be cancelled if the passage through the Speedgate is not completed within a pre-set time i.e. 5-30 seconds

4.2 Dimensions and weights



Model	Overall height	Passage width	A	B	C	Side cabinet weight	Side cabinet weight
Standard short	950 mm	550 mm	950 mm	1448 mm	300 mm	120 kg	145 kg
Wide short	950 mm	900 mm	950 mm	1448 mm	480 mm 490 mm for EV	145 kg	190 kg
Standard long	950 mm	550 mm	950 mm	1932 mm	300 mm	200 kg	240 kg
Wide long	950 mm	900 mm	950 mm	1932 mm	480 mm 490 mm for EV	250 kg	280 k

5 Operation

5.1 Instructions for use

The information contained in this section, should be used as a basis for the instruction of personnel in the correct use of the Speedgate Range of Barriers.

The Speedgate is unlocked by presenting a personalised identity card or device to the access control reader. (Supplied by others) It can also be unlocked by depressing a

button on the casework or remote reception push button, (if fitted), or Free Passage configuration. This will activate the mechanism and retract the wings into the casework, rendering the Speedgate ready for use, by walking through the passageway in the authorised direction.

Should the user decide not to proceed with the passage, the Speedgate will remain unlocked for a predetermined time after which it will 'time out' and reset, becoming available for the next person/user.

After the passage is complete, the mechanism will be reactivated automatically, operating the wings & driving them into the closed position.

Always check the status lights (if fitted) mounted on the top of the Speedgate for rite of passage. E.g. A red Cross denotes the opposite direction has rite of passage or, a Green Arrow denotes rite of passage. Should the Speedgate be used in the incorrect manner, i.e. used out of passageway sequence, the wings will close and an alarm will sound. Do not panic, retreat from the walkway & wait for the alarm to stop. The system will reset automatically. During the alarm stage, the status lights will flash, after a reset occurs, check the status of the lights for rite of passage.

Do not attempt to follow a person through the Speedgate if you do not have authorisation. This is known as Tailgating and will activate the controller to close the gates between the authorised and unauthorised user. The Speedgate will then go into the alarm and reset phase.

If the Speedgate and access control system has been configured for multiple authorisations, (known as Stacking), the users may proceed in close proximity after the preceding passage occupant. Again, the status lights should be checked for rite of passage.

Should the Speedgate be set up for free passage, there is no need to wait for any authorisation; the passage may be freely used. Again, check the status lights for rite of passage & in normal operation, the opposite passage will be activated via the access control device requiring authorisation.

5.2 Normally open

In Normally Open configuration, the Speedgate will operate identically as for Normally Closed, except for the following.

The wings in normal operation will be fully retracted into the casework. On acceptance of a badge from an authorised user, the Speedgate will remain inactive. However, should an unauthorised person attempt to gain access through the passage; the controller will activate the mechanism to block the walkway by closing the wings. The Speedgate will then go into the Alarm State.

The Normally Open mode is available only for the long cabinet version.

5.3 Emergency and fire alarm

The Speedgate can be configured to fully open the wings when an emergency or fire Alarm signal is given to the controller by the appropriate detection system. (Supplied by others) This condition will remain for the duration of the signal being received by the controller. Power Failure

In the event of isolation of the power supply, the wings remain in the current position. Battery Back Up is available as an optional extra to operate the wings to open in a power down scenario.

The optional battery back up will operate the Speedgate to complete or commence an operating cycle, so the wings drive open in the event of a power failure.

Safety

The Speedgate passage is protected via a safety photocell, so that when a presence is detected, the wings will not operate until that presence is removed. In this condition, the Speedgate will automatically go into Alarm condition. Should an obstacle be detected by the wings during the closing phase, they will back off into the open position. In this condition, the Speedgate will automatically go into alarm condition.

5 Operation

Activation of the remote command or serial line command has priority over the setting made using the programmable parameter.



CAUTION

Damage to the system or injury of persons

Not taking care of the safety settings can cause damage to the system or can harm people.

- a) DO NOT- Walk through the barrier with large bags or briefcases in front, or trailing behind you.
- b) DO NOT- Drag bags over the casework top

5.4 Operating Modes

The Speedgate operation is bi-directional. The two passageways, direction A (the master casework is at the right hand of the user) and B can be managed in one of the following modes:

Free:	The gate enables transit of all passengers in the corresponding direction, the entry and/or exit Pictograms and waymodes have green arrows.
Blocked:	The gate does not enable transit in corresponding direction, entry and/or exit Pictograms and waymodes have the red cross.
Controlled:	The gate allows transit only to persons authorized by the access control system.
Normally Closed:	In standby, the gate presents itself to the user with the door closed.
Normally Open:	In standby, the gate presents itself to the user with the door open.

Free: the gate enables transit of all passengers in the corresponding direction, the entry and/or exit traffic-lights have the green arrow;

- Blocked: the gate does not enable transit in corresponding direction, entry and/or exit traffic-lights have the red cross;
- Control: the gate allows transit only to persons authorized by the access control system.

The operating mode of the gate can be set by means of:

- Programmable parameters
- Gate itself (on failure, etc.)
- RS485 serial line or remote command on the COMR1 optional board.
- The serial line or remote command has priority over the settings made using the programmable parameter.

The mode change is possible only if the gate is in stand-by condition: the gate should not be engaged, in alarm or emergency conditions.

5.5 Passage Management

The command logic manages all of the systems actions, which allows a person to move through the passageway. The logic uses all the information interpreted from the photocells to detect the presence and position of persons in the inside walkway.

In addition, it receives permissive signals from the readers and at the same time, provides the readers with activation and transit completed signals. It controls and regulates movement of the mechanisms and effects all related acoustic and visual warnings.

In the controlled mode the gate waits for reader signal in order to allow transit of the user. It is possible to allow the user to enter inside the gate and then to validate. Alternatively, the user must validate standing outside the gate.

This operation mode could be chosen by programmable parameter. In the first case, the user can wait for the permissive signal inside the gate, but the permissive signal shall arrive within a time-out limit. This time-out depends on the value of specific programmable parameters (see “Transit Group” in the annex “Parameter Table”). At the end of the time-out, if the validation has not arrived, an alarm condition is generated: in that case no acoustic signal is emitted but only visible signal in order to hurry up the user to validate or free the gate.

5.6 Alarms

The logic system for the passageway detectors will recognise situations or scenarios, where persons incorrectly use the passageway, including if they are not authorised to transit. Therefore, the system generates an alarm signal when these conditions occur.

An alarm warning involves:

- A buzzer generates an acoustic sound which is repeated approximately at a one second cadence.
- At the same time, the traffic lights and pictograms flash, displaying a Red Cross.
- At the same time the alarm signal output on the COMR1 optional board is activated and de-activated.
- The gate wings are closed.
- On the LCM02 circuit board display, on the master command wing side, a message appears indicating that specific condition. (Only if button SW2 is pressed once). The alarm signal output is activated.
- The readers could be de-activated, depending on the value of the programmable parameter ModoCntr.
- A message is sent via RS485 serial line regarding the type of alarm. The alarm signal continues until the cause which generated it, is removed. It then stops after a short delay. This delay can be regulated with the programmable parameter TResAll.

The alarm signal continues until the cause which generated it is removed. The activation of the alarm signal output relay could be delayed by means of a programmable parameter. The flashing frequency of the traffic lights and pictograms can be regulated by means of a programmable parameter. These parameters are described into “Fraud Group” in the annex “Parameter Table”.

When the system is in an alarm state, the unit can still accept validation signals from the access control system, but the user will not be able to begin the transit until the alarm has cleared and the unit has returned to its secure default configuration.

By means of a programmable parameter (see “Reader Group” in the annex “Parameter Table”), the logic could be set to ignore any new reader authorization during the alarm. In that case the authorization is not registered by the system and the user will need to restart the signal validation process after the alarm has cleared and the unit is back to its secure default configuration.

The tailgating detection system selectivity of the Speedgate Flap can be tuned (the ability to intercept a person who follows a person with authorisation for transit) with the friendly usability of the gate. See the section “Fraud Alarms Selectivity” for more details.

5.7 Programmable parameters

The system operation is conditioned by the values given to certain parameters stored in the EEPROM on the control board. When the control logic microprocessor executes the resident program, it consults the values of the programmable parameters and sets the timings of certain actions and internal algorithms. The values of these parameters can be adjusted or reset to a standard configuration by following the procedures given.

6 Servicing and maintenance

6 Servicing and maintenance

6.1 General care



CAUTION

Access to the electrical installation is strictly reserved to authorized maintenance technicians.

The Speedgate Swing Slim must be cleaned and greased at regular intervals, using the following approved materials in order to ensure a constant functioning and to extend service life.

Routine cleaning, all finishes

Cleaning agent: Soap or mild detergent water.

Action: Sponge rinse with clean water, wipe dry as necessary.

Stubborn stains and discolouration, all finishes

Cleaning agent: Mild cleaning solutions or domestic service cleaners.

Actions: Rinse well with clean water and wipe dry.

Oil, Grease marks, all finishes

Cleaning agent: Organic solvents (acetone, alcohol, genclene, trichlorethane).

Action: Clean after with soap and water, rinse well with clean water and wipe dry.

Rust and other Corrosion products, Stainless finishes

Cleaning agent: Oxalic acid. The cleaning solution should be applied with a swab and allowed to stand for 15 to 20 minutes before being washed away with water. Continue using a domestic surface cleaner to give a final clean.

Action: Rinse well with clean water (precautions for acid cleaners should be observed).

Minor scratches on painted surfaces

Cleaning agent: Lightly rub with cutting paste. Rinse area with water and dry. Apply touchup paint in fine layers.

Action: Allow 2 weeks to harden. Blend into surrounding paint work, using fine cutting paste

Deep scratches on painted finishes causing rust

Cleaning agent: Remove rust with a small sharp knife. Apply rust inhibiting paint. Fill scratch with fine body filler to just under finished surface. Follow procedure for minor scratches.

Greasing

This action is carried out by the Service Engineer during service visits.

6.2 Routine maintenance

The mechanism should be inspected and cleaned at regular intervals, in order to maintain all components correctly & to keep them in good working order. Also to check for signs of wear.



WARNING

To avoid the risk of electric shock, always ensure that the electrical power and batteries are disconnected before inspecting the mechanism.



NOTICE

The following indications refer to an installation where the average number of transits per year is equal to one million.

When used in dusty conditions, increase the inspection intervals.

Lubricants

For the lubrication of parts subject to wear, use Molycote BR2 Plus grease or equivalent grease containing graphite or molybdenum sulphide (MoS₂).

Do not grease moving parts unless specifically indicated in this manual. The use of grease can lead to a build-up of dust that can impair operation of the mechanism.

Components

Annual Checks (Operations to be carried out with the power supply disconnected).

Cables and Connectors (Operations to be carried out with the power supply disconnected).

- Check that the wire connectors are firmly attached.
- Check that the terminals are fully tightened.
- Check that the insulation of the wires is in good condition and that no conductors are exposed.

Electrical Circuits

No general Maintenance is required apart from replacement fuses in the event of a failure.

7 Malfunctions

7 Malfunctions

7.1 Fault Finding

During normal operation, the main control logic GC01 displays a collection of messages regarding the normal status or the fault conditions. To read the messages displayed by the GC01 is the first check to do in case of failure of the Speedgate Flap

Symptom	Check	Action
Panels do not drive	Check mains input voltage and 24 VDC supply on logic boards	Replace transformer
	Fuses on all three logic boards	Replace as required Increase back-off sensitivity If F1 fuse has blown motor may be permanently damaged
	Check functionality of all the logic boards on each electrical plate, especially MB01 drive cards	Re Flash Firmware Perform a re learn Replace as required
	Card reader inputs	Remove card reader connections and link across the inputs
	Photocells, perform diagnostic test using GC01 to check that all the photocells are working	Replace faulty photocell(s) if required Check brackets
Unit alarms	Battery back up	If fitted the cells may be in need of replacement. If they are not fitted the self-test function should be disabled by changing the relevant parameter Check looms.
Panels do not close after transit	Safety photocell	Replace if required
Panel(s) do not back off when obstructed	Trimmer on MB01 drive card	Tune the obstacle sensitivity. Replace MB01
Panel(s) pulses when in open or close position	Trimmers on MB01 drive card	Tune the offsets. Replace drive card if required
Panel(s) do not open and close correctly	Trimmers on MB01 drive card	Launch the learning procedure. Replace drive card if required
	Encoders	Replace if required Check encoder mounted correctly Check looms Check Mech setting
Panel(s) open and close very fast.	Encoders, and encoder looms	Replace if required Check encoder mounted correctly Check looms Check Mech Setting
	Incorrect mechanism selected	Adjust on MB01 board

7.2 Fault diagnosis

The diagnostic module is capable of signalling a fault condition through the following channels:

- Buzzer
- 7 segment display on the NEP Lite board.
- Serial line protocol

The diagnostic module is capable of monitoring the following sub systems

- Passage Sensors
- Motor driver
- Motor encoder

For each sub system the diagnostic gathers the following information

- Fault category (or sub system with the issue)
- Board address
- Fault code

On the NEP Lite 7 segment display the faults are shown one by one in the following format

F	Address	Cat	Code
F	F is a fixed character and stands for fault.		
Address	Address is the side the fault is generated from either Master or Slave.		
Cat	Cat is the fault category and is represented by a single letter (See fault code tables).		
Code	Code is a number from 0-255 and is specific to the fault category (See fault code tables).		
0	Master		
1	Slave		

7.3 Fault code tables

Cat Codes

Cat	Description
D	Motor drive
E	Encoder
P	Sensors

Motor Drive Fault Codes (d)

Dec code	Hex code	Description
1	1	Mechanism PAR_MECHANIS M_TY PE is out of range.
2	2	Motor drive cannot be initialised.
3	3	Encoder cannot be initialised.
4	4	Encoder module fails.

Encoder (d)

Dec code	Hex code	Description
1	01	Channel #1 too low or position below min
2	02	Channel #1 too high or position above max.
4	04	Encoder channel cannot be initialised.
8	08	Channel difference too low.
9	09	Channel #1 too low and channel difference too low.
10	0A	Channel #1 too high and channel difference too low.
16	10	Channel #2 too low.
17	11	Channels #1 and #2 too low.
18	12	Channel #1 too high and channel #2 too low.
24	18	Channel difference too low and channel #2 too low.
32	20	Channel #2 too high.

7 Malfunctions

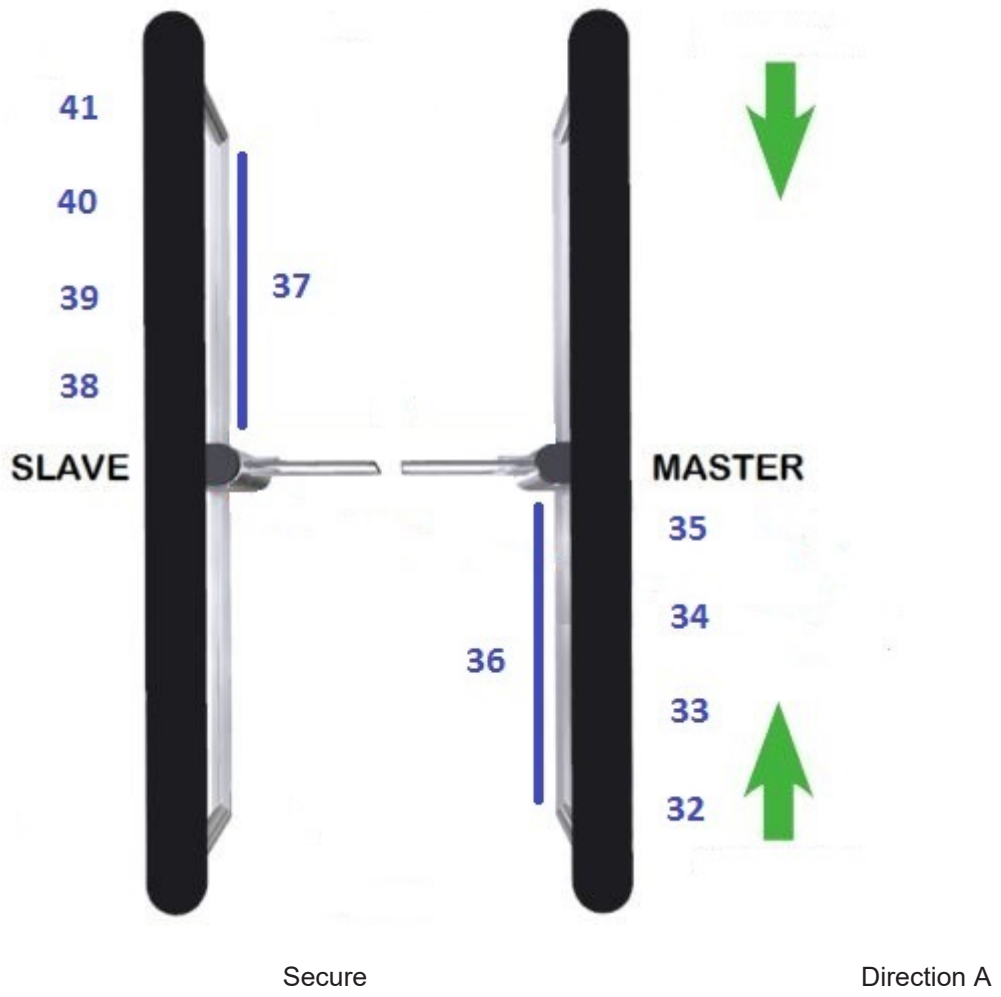
Dec code	Hex code	Description
33	21	Channel #1 too low and channel #2 too high.
34	22	Channels #1 and #2 too high.
40	28	Channel difference too low and channel #2 too high.
41	29	Channel #1 too low, channel #2 too high, and channel difference too low.
42	2A	Channels #1 and #2 too high and channel difference too low.
128	80	Channel difference too high.
129	81	Channel #1 too low and channel difference too high.
130	82	Channel #1 too high and channel difference too high.
144	90	Channel #2 too low and channel difference too high.
145	91	Channels #1 and #2 too low and channel difference too high.
146	92	Channel #1 too high, channel #2 too low, and channel difference too high.
160	A0	Channel #2 too high and channel difference too high.
161	A1	Channel #1 too low, channel #2 too high, and channel difference too high.
162	A2	Channels #1 and #2 too high and channel difference too high.

Sensors (p)

Dec code	Hex code	Description
1	1	At least one passage sensor failed test #1
32	20	Passage sensor #1 failed test #2
33	21	Passage sensor #2 failed test #2
34	22	Passage sensor #3 failed test #2
35	23	Passage sensor #4 failed test #2
36	24	Passage sensor #5 failed test #2
37	25	Passage sensor #6 failed test #2
38	26	Passage sensor #7 failed test #2
39	27	Passage sensor #8 failed test #2
40	28	Passage sensor #9 failed test #2
41	29	Passage sensor #10 failed test #2

Non secure

Direction B



8 Taking out of service and disposal

8 Taking out of service and disposal

8.1 Decommissioning

When shutting down or taking out of service, the system is disconnected from the mains supply and any existing battery is unplugged.



NOTICE

After each temporary shutdown a new commissioning must be carried out.

8.2 Dismantling and disposal



IMPORTANT

All machine parts must be sorted by type of material and disposed of according to local regulations and guidelines.



NOTICE

The door systems can be completely disassembled in reverse order.

The automatic door mainly consists of the following materials:

Aluminum:

- Linking profiles
- Gearbox, Drive panel
- Door wing profiles and side profiles
- Various profiles and small parts

Steel / iron parts:

- Stainless steel casing, Floor panel, Box recess for floor installation
- Optional spacer or reinforcement profiles
- Gear components, springs
- Various small parts like fittings, covers, linking parts, etc.

Glass:

- Door wings and side panels

Various electronic and electromechanical components:

- Sensors, control and operator components
- Lead batteries and nickel-cadmium rechargeable batteries

Various plastics:

- Rollers
- Cable clips, coupling and linking parts
- Sealing profiles
- Casing of electromechanical components and sensors



Australia
www.recorddoors.com.au



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www.recorddoors.com



China
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