

DOOR SYSTEMS

Electric Sectional Door

User's Manual



Table of Contents

1.	For Your Safety	2
2.	Operation	3
3.	Locking	7
4.	Manual Override.....	8
5.	Safety Sensors.....	10
6.	Additional Features.....	11
7.	Safety Devices.....	12
8.	Wicket Access Door	12
9.	Cleaning & Maintenance	13

1. For Your Safety

Please read and observe this manual. It provides you with important information about the safe operation, cleaning, and maintenance of industrial doors. The information is for guidance only and is deemed correct at the date of issue.

- All users must read and understand this document prior to operating the door.
- Regularly inspect the door for any damages. Report any damages before use.
- Do not use the door as a hoist
- Do not climb on the door.
- Do not lean against the door or guide track.
- Ensure the door and opening is clear of any obstructions prior to use.
- Doors should be regularly maintained and inspected by a qualified engineer.
- Only qualified engineers should undertake repairs to the door.
- Do not operate the door in heavy winds.

2. Operation

There are many variations of operation available on electric doors. We have tried to cover the most common ones within this section, however, if you are not sure, please contact our service department for further advice. Please ensure that the door and opening is clear of any obstructions prior to operation. Should you experience any difficulty, please contact our service department.

Push Button Station (Or Rocker Switch)

A push button station usually consisting of two or three button. Usually mounted internally for security.

To Open via Push Button Station

- Ensure that all locking mechanisms have been removed, the wicket door has been hinged completely to one side (if applicable), and the emergency stop button is released (if applicable).
- Press and hold the 'Open' button. Ensure that the door is open to the full height and then release. Some doors will have an impulse open function which will allow you to press and release the 'open' button and it will travel to the fully open position automatically.

Attention

- Should the door unexpectedly stop during operation and not operate it is possible the safety brake has engaged, or there has been a mechanical failure. Please contact the service department
- For safety, always open the door to full height.

To Close via Push Button Station

- Ensure the opening is clear of any obstructions.
- Press and hold the 'Close' button. Ensure that the door is fully closed and then release. Some doors will have an impulse close function which will allow you to press and release the 'close' button and it will travel to the fully closed position automatically.

Attention

- Should the door unexpectedly stop during operation and not operate it is possible the safety brake has engaged, or there is a mechanical failure. Please contact our service department
- For safety, always fully close the door.

To Stop via Push Button (Not available on Rocker Switch)

- If the door has been activated and is closing or opening automatically it can be stopped at any time by pressing the 'Stop' button (if available). Some stop buttons have an emergency hold function which will keep the stop button activated until it is twisted to release.

Key Switch

A key switch is usually mounted externally and can only be operated via a key.

To Open via Key Switch

- Ensure that all locking mechanisms have been removed, the wicket door has been hinged completely to one side (if applicable), and the emergency stop button is released (if applicable).
- Insert the key into the key switch, turn to the open direction and hold. Ensure that the door is open to the full height and then release. Some doors will have an impulse open function which will allow you to turn and release the key and it will travel to the fully open position automatically.

Attention

- Should the door unexpectedly stop during operation and not operate it is possible the safety brake has engaged, or there has been a mechanical failure. Please contact the service department
- For safety, always open the door to full height.

To Close via Key Switch

- Ensure the opening is clear of any obstructions.
- Insert the key into the key switch, turn to the close direction and hold. Ensure that the door is fully closed and then release. Some doors will have an impulse close function which will allow you to turn and release the key and it will travel to the fully closed position automatically.

Attention

- Should the door unexpectedly stop during operation and not operate it is possible the safety brake has engaged, or there is a mechanical failure. Please contact our service department
- For safety, always fully close the door.

Remote Control

A remote control key fob that usually consists of 2-4 buttons. Operation can vary depending on setup.

To Open via Remote Control

- Ensure that all locking mechanisms have been removed, the wicket door has been hinged completely to one side (if applicable), and the emergency stop button is released (if applicable).
- Press and hold the 'Open' button. Ensure that the door is open to the full height and then release. Some doors will have an impulse open function which will allow you to press and release the 'open' button and it will travel to the fully open position automatically.

Attention

- Should the door unexpectedly stop during operation and not operate it is possible the safety brake has engaged, or there has been a mechanical failure. Please contact the service department
- For safety, always open the door to full height.

To Close via Remote Control

- Ensure the opening is clear of any obstructions.
- Press and hold the 'Close' button. Ensure that the door is fully closed and then release. Some doors will have an impulse close function which will allow you to press and release the 'close' button and it will travel to the fully closed position automatically.

Attention

- Should the door unexpectedly stop during operation and not operate it is possible the safety brake has engaged, or there is a mechanical failure. Please contact our service department
- For safety, always fully close the door.

To Stop via Remote Control

- If the door has been activated and is closing or opening automatically it can usually be stopped at any time by pressing the 'Stop', 'Open', or 'Close' button.

Lockable Push Button Station

A push button station usually consisting of two or three buttons and a key switch. Usually mounted externally. The key turns the buttons 'on' for activation or 'off' for security.

To Open via Lockable Push Button Station

- Ensure that all locking mechanisms have been removed, the wicket door has been hinged completely to one side (if applicable), and the emergency stop button is released (if applicable).
- Insert the key and turn to the 'on' position.
- Press and hold the 'Open' button. Ensure that the door is open to the full height and then release. Some doors will have an impulse open function which will allow you to press and release the 'open' button and it will travel to the fully open position automatically.
- The buttons will remain 'on' until you turn the key to the 'off' position.

Attention

- Should the door unexpectedly stop during operation and not operate it is possible the safety brake has engaged, or there has been a mechanical failure. Please contact the service department
- For safety, always open the door to full height.

To Close via Lockable Push Button Station

- Ensure the opening is clear of any obstructions.
- Insert the key and turn to the 'on' position. (This step may not be required if the buttons are already turned on).
- Press and hold the 'Close' button. Ensure that the door is fully closed and then release. Some doors will have an impulse close function which will allow you to press and release the 'close' button and it will travel to the fully closed position automatically.
- The buttons will remain 'on' until you turn the key to the 'off' position.

Attention

- Should the door unexpectedly stop during operation and not operate it is possible the safety brake has engaged, or there is a mechanical failure. Please contact our service department
- For safety, always fully close the door.

To Stop via Push Button

- If the door has been activated and is closing or opening automatically it can be stopped at any time by pressing the 'Stop' button.

Numeric Key Pad

A numerical key pad that usually operates via a 4 digit code. There may be 2 codes, one to close and one to open, depending on device setup, and sometimes there may be a timer lock out function. Speak to our service department for further advice

To Open via Numeric Key Pad

- Ensure that all locking mechanisms have been removed, the wicket door has been hinged completely to one side (if applicable), and the emergency stop button is released (if applicable).
- Enter the code to open the door.

Attention

- Should the door unexpectedly stop during operation and not operate it is possible the safety brake has engaged, or there has been a mechanical failure. Please contact the service department
- For safety, always open the door to full height.

To Close via Numeric Key Pad

- Ensure the opening is clear of any obstructions.
- Insert the code to close the door.

Attention

- Should the door unexpectedly stop during operation and not operate it is possible the safety brake has engaged, or there is a mechanical failure. Please contact our service department
- For safety, always fully close the door.

Emergency Stop Button

Some doors have an Emergency Stop Button which is a fail-safe control switch that cuts the electricity to the motor.

To Stop Operation

- Push the button to stop.

To Resume Operation

- Twist the button clockwise to release the button
- Then operate the door via the standard operator provided.

3. Locking

Your door may have been supplied with a locking mechanism. Please ensure all locks are removed prior to operation to prevent damage to the door.

Ground Lock

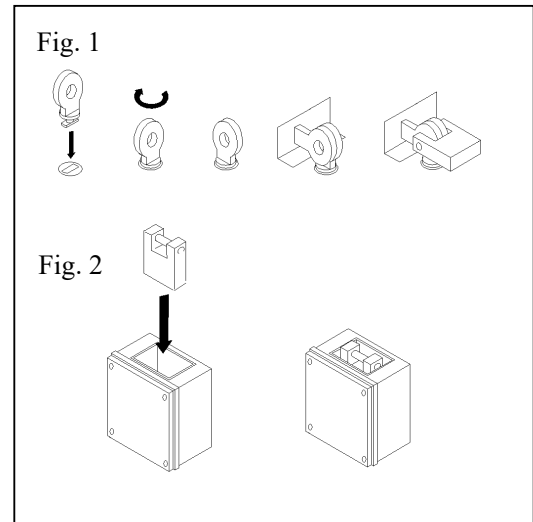
Ground locks hold the door leaf to the floor. They are usually supplied as a single lock, but more than one may be installed.

To lock the door

- With the door in the open position, locate the eyelet into the floor receiver and turn 90 degrees clockwise (Fig 1).
- Close the door to the floor and the two eyelets should roughly lineup. You may need to give it a wiggle to line it up. Once in line, insert the padlock.

To remove the lock

- Unlock and remove the pad lock.
- Open the door. Then twist the eyelet 90 degrees counter clockwise to remove. Never leave an eyelet in the floor.
- If an isolator box has been supplied, insert the pad lock into the box to engage electric operation (Fig 2)



Shoot Bolt

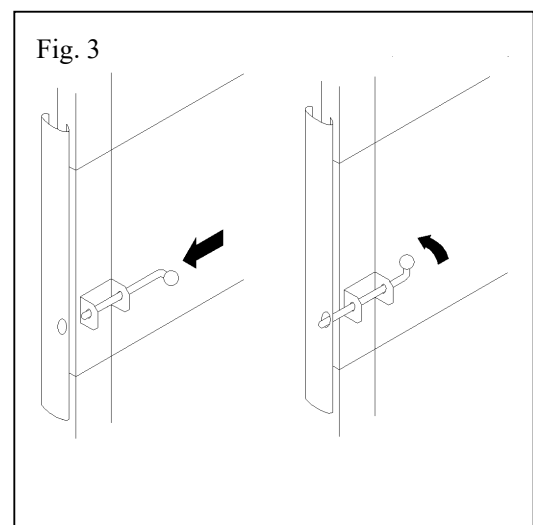
Shoot bolts hold the leaf to the track system. They are usually supplied as a single lock but more than one may be installed.

To lock the door

- With the door in the closed position, push the shoot bolt into the guide (Fig 3). You may need to apply downward pressure to the door to ensure the locks fully engage.
- Once engaged, rotate the handle upwards to hold into position.
- If the door has been supplied with an interlock, the door will now not work electrically.

To unlock the door

- Rotate the shot bolt downwards approx 90 degrees. The lock is spring loaded and should release when in the correct position. You may need to apply pressure downwards on the door to disengage.



4. Manual Override

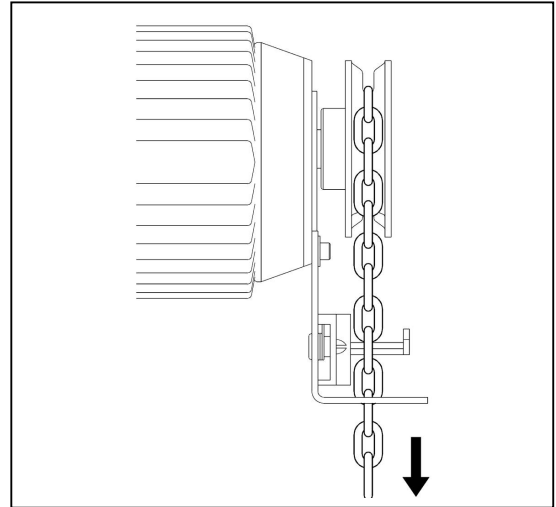
Your sectional door may have been supplied with a manual override. The override is only designed for use in the event of a power failure and should not be in constant use. There are various overrides available depending on the motor type, we cover the 3 main options below. Please note that if there is mechanical failure of the motor or door, the manual override may not work.

High Level Chain Override

An override that is operated at low level but requires engaging at high level before operation.

To operate the override

- At high level, lift the chain off the red safety switch and place it on the chain wheel.
- Gently pull the chain in either direction to operate the door. Once you have found the direction you require, continue until the door is fully open or closed. There may be no mechanical limitations on the travel of the shutter so be careful not over wind the override. The operation will be slow, this is normal.
- Once complete, remove the chain from the chain wheel and place back onto the red safety switch. Ensure the safety switch is fully compressed. The motor will not operate electrically until this is complete.

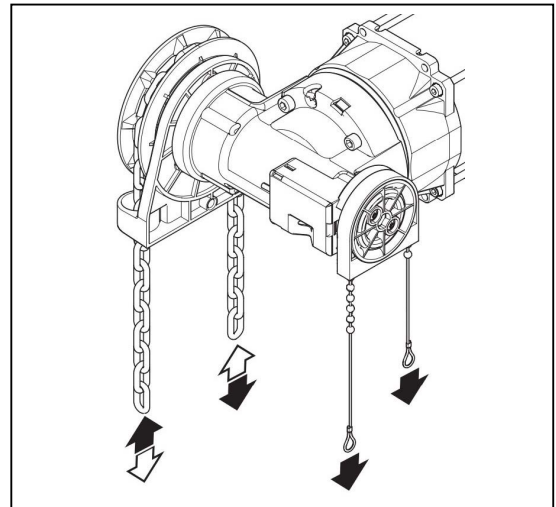


Low Level Chain Override

An override that is engaged and operated at low level.

To operate the override

- Gently pull the red toggle handle downwards to engage the override. The motor will no longer work electrically.
- Gently pull the chain in either direction to operate the door. Once you have found the direction you require, continue until the door is fully open or closed. There may be no mechanical limitations on the travel of the shutter so be careful not over wind the override. The operation will be slow, this is normal.
- Once complete, gently pull the green toggle handle downwards to disengage the override. The motor will not operate electrically until this is complete.

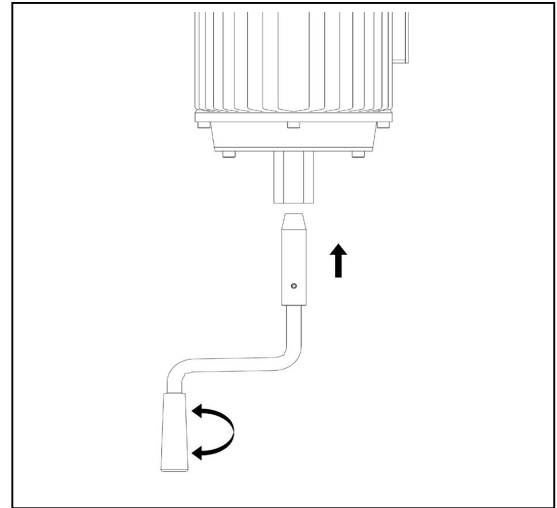


High Level Crank Override

An override that is engaged and operated at high level.

To operate the override

- At high level, insert the hand crank (supplied separately) into the bottom of the motor as far as it will go.
- Gently turn the crank in either direction to operate the door. Once you have found the direction you require, continue until the door is fully open or closed. There may be no mechanical limitations on the travel of the shutter so be careful not over wind the override. The operation will be slow, this is normal.
- Once complete, remove the crank. The motor will not operate electrically until this is complete.



5. Safety Sensors

Some doors may have been supplied with some additional safety sensors to detect the presence of persons or obstructions. This is a legal requirement on doors that can close by just the press of a button, or have an automatic timer return.

Photo Safety Cell – Low Level

The photo safety cell is mounted close to the guides of the door at low level and emits a light beam across the opening and is either reflected back to its emitter or collected by a receiver. If the beam is obstructed during the door's close operation the door will stop and return to the fully open position until the obstruction is removed.

Please note, that if a sensor is knocked out of alignment, the beam will not register and the door will stay open.

Photo Safety Cell – High Level

The photo safety cell is mounted close to the guides of the door at high and emits a light beam across the opening and is either reflected back to its emitter or collected by a receiver. If the beam is obstructed during the door's open operation the door will stop. This is to prevent persons getting drawn into the drive assembly at the top of the door.

Please note, that if a sensor is knocked out of alignment, the beam will not register and the door will not operate.

Safety Bottom Edge

The safety bottom edge is concealed within the bottom seal of the door and detects objects by compression of the seal (by contacting the obstruction). There are different variations available, including pneumatic, photo electric, and conductive.

Please note, that if the bottom edge of the door is damaged it is likely that the sensor will register an obstruction even if there isn't one present, and will stay open.

There are wireless sensors available which require batteries to be replaced regularly. The batteries will be found within the sensor which is mounted to the bottom of the door. Please ensure the battery voltage meets the requirements.

Laser Grid

Similar in principal to the Photo Safety Cell, but emits many sources of light with multiple receivers to cover a larger area and is therefore much safer.

Again, if a sensor is knocked out of alignment, the beam will not register and the door will stay open.

6. Additional Features

Some doors may have been supplied with some additional activation features. These are generally only found on industrial applications and a few are covered below.

Timer Return

A timer that automatically closes the door after a set time. Settings can only be modified by a technician.

Induction Loop

A sensor mounted within the floor close to the door that detects vehicles and open the door.

Radar

A sensor that can detect movement of persons or vehicles within a designated area which then opens the door. Settings can only be adjusted by a technician.

Battery Back Up

A battery unit to provide an uninterrupted power supply to a door. Due to the heavy power requirements of the operation; the usage of the battery should be limited. Some batteries require 'turning on' via a key switch or remote before they will operate, and some batteries are permanently on. Battery units will 'beep' regularly if the power supply has failed or the battery life is exhausted.

7. Safety Devices

The Sectional Door has been equipped with safety devices to ensure safety during operation and use.

Cable Safety Brakes

If a cable breaks the fall safety device will prevent the door from falling. If this safety device is triggered, the door will be held in position by safety catches in the tracks. An engineer must be called to replace the cable and release the safety device.

Spring Safety Brakes

In the unlikely event that a spring may break, the spring safety brakes will engage and stop the door from falling. This will also prevent the door from operating. Please contact our service department for a repair.

8. Wicket Access Door

Your door may have been supplied with a wicket access door to allow passage for personnel through without operating the main door leaf. This door is used and locked like a standard hinged door set. You must ensure that the wicket door is fully closed before operating the main door leaf.

9. Cleaning & Maintenance

Cleaning

It is important to ensure that the door is kept clean from dust, dirt, leaves, small branches etc, especially from the guide system. General dirt and debris can build up in the guides and obstruct the travel of the door. This should be checked and cleared periodically, just with a brush.

The door leaf and outside of guides can be cleaned using a rag, sponge, and general non-abrasive detergents. For your safety, please be careful not lean ladders against the door or guides during cleaning.

Do not attempt to clean the motor or control panel as this is potentially dangerous.

Safety photo cells should be carefully cleared using a dry rag; with care taken not to dislodge their position as this could cause the shutter to stop working.

Maintenance

Maintenance and repairs should only be undertaken by an experienced technician. Do not attempt to undertake any maintenance or repairs. Please contact our service department for a quotation.

Regulations dictate that all industrial doors be inspected for safety periodically, under a preplanned maintenance regime. The door should be inspected for safety, regularly maintained, and kept in good repair. Failure to do so could lead to damage to property or injury to persons.

The frequency of inspection is dependant upon usage. Minimal usage doors (e.g. Grain Stores) should be inspected annually, more frequently used doors (e.g a distribution centre loading bay) should be inspected every six months, and heavily used doors (e.g a car park shutter) should be inspected every three months. Contact our service department for further advice.

Daily Checks

It is advisable that before the door is used, a quick visual check for any damages should be completed. Do not attempt to repair any damages, please call our service department for help and advise.



DOOR SYSTEMS

BIS Door Systems Ltd
13-14 Hodgson Court, Hodgson Way, Wickford, Essex, SS11 8XR
Tel: 01268 767566
info@bis-doors.co.uk
www.bis-doors.co.uk

Subject to technical changes.