



# HYDRO DOORS

Quality Access Technology

## Installation & Instruction Manual



**digi • one**

*Types of Doors that can be automated using the digi.one:*

- Sectional overhead doors, single/double, steel or timber.
  - Tip – up doors, steel or timber.

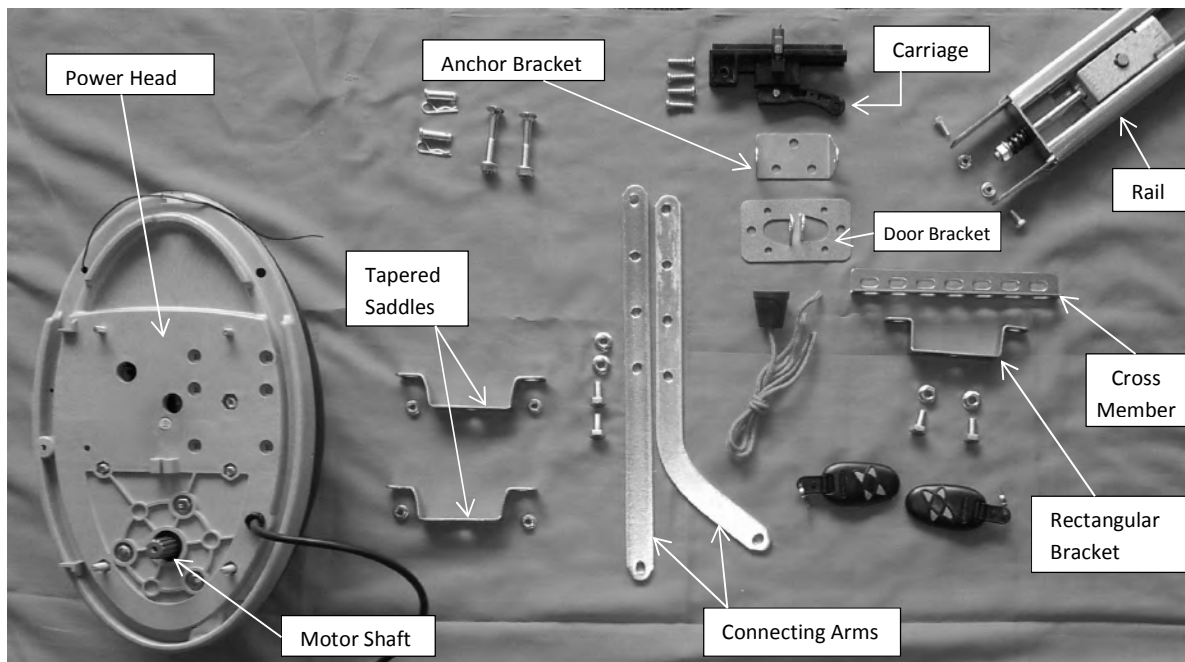
**1. Features**

- Microprocessor based control system
- One button to open, close and stop
- Bright LED courtesy light, with a 3 minute time-out
- Easily adjustable operating force/obstacle sensing
- Supports Safety Beams
- Optional back-up battery
- Auto-close feature
- 24V DC Motor provides superior power to weight, giving quiet, smooth operation with soft starting and stopping
- Protected against overload and over-heating
- Reliable chain-drive
- Sturdy steel Rail
- LED Display – simplifies function programming
- Security – is ensured by the use of code-hopping technology
- Manual Over-ride – a simple release allows the door to be operated by hand
- Options – Safety Beams, back-up battery, wall button and Auto-close

**2. Technical Specifications**

Power Input	220VAC +10% 50~60Hz	Receiver Frequency	433.92MHz
Motor	24VDC	Decoding	Rolling Code
Working Temp	>-20C, <+50C	Courtesy Lamp	LED
Relative Humidity	< = 90%	Courtesy Lamp Time	3 minutes
Operating Force	1000N	Fuse	2,5A 250V

**3. Contents of the box**



**Door Condition:**

For successful automation, a door should be in good working condition, i.e. it should be possible to open and close easily with one hand, be correctly sprung and run smoothly without sticking or binding. Torsion springs should be greased. Tracks should be well secured with correct clearances and be clean and free of grime. Badly worn hinges, rollers and bushings should be repaired or replaced. Remove all unnecessary ropes, brackets, levers, etc.

**Caution!** Garage doors, door springs, cables, pulleys, brackets and hardware are under extreme force and can cause serious personal injury.

**Note!** Most complaints of unsatisfactory garage door operation can be traced to problems with the door itself. The **digi.one** is not intended to correct any problems that are caused by an unbalanced or binding door. When operated manually, a properly balanced door will remain stationary, at any point of its travel, while being supported entirely by its springs.

For optimum reliability and lifespan of your **digi.one** operator, have your garage door serviced regularly.

## 4. Installation

### 4.1 Recommended Tools and Equipment for this Installation

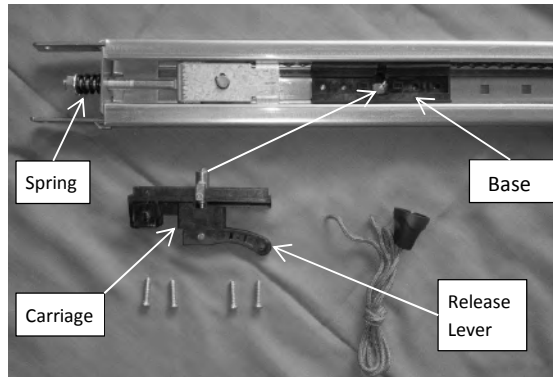
Electric Drill –  
 Impact, Variable Speed, Reversible  
 Drill Bits  
 Masonry: 6mm, 10mm  
 Steel: 6mm, 10mm, 12mm  
 Hacksaw  
 Screwdriver - Ø 3mm  
 Screwdriver - ⊕ 6mm

Spirit Level  
 Tape Measure – 5m  
 Hammer  
 Spanners  
 Sockets: 8mm, 11mm, 13mm  
 Flat/Ring: 10mm, 11mm, 13mm, 14mm  
 Step Ladder – 1,7m ~ 2m high  
 Extension Lead – to suit

### 4.2 Installing the Operator and Rail

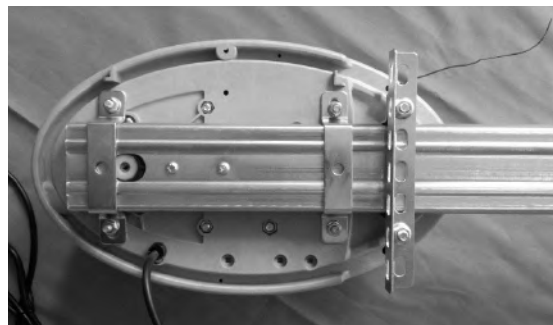
With the Release Lever pointing away from the Spring, fit the Carriage to the Base using 4 Phillips Screws.

Attach the Release Cord to the Release Lever.



While engaging the motor shaft with the sprocket, place the Rail on top of the Power Head.

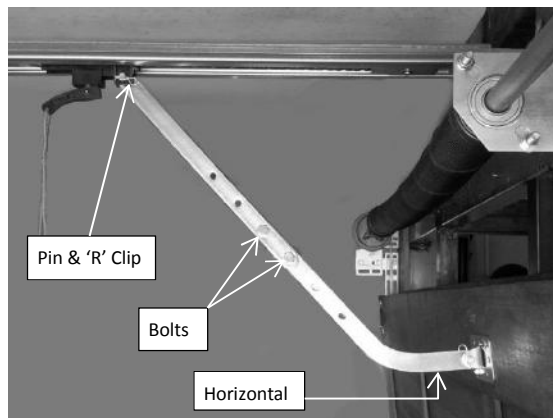
Bolt the rectangular Saddle to the Cross Member on the Rail in the space at the front of the operator.  
 Secure the Tapered Saddles to the four Studs with Flange Nuts.



Mount the Anchor Bracket to the front wall on the door centre-line.  
 Secure the foot of the Rail to the Anchor Bracket.

Once the Power Head has been suspended, fit the Connecting Arms as shown, using the Pins and 'R' Clips.

Overlap the Arms and bolt them such that the short section is horizontal.



Using suitable material bolted to the Cross Member, secure the Power Head overhead, so that the Rail is horizontal.

Plug the Mains Cord into a socket installed according to regulations.



## 5. Electrical Terminals and Connections

*Note:* The Terminals can be accessed by un-clipping and removing the Light Lens.

Should the main cover need to be removed, remove the screw at the front and support the cover so that the hook at the rear is not stressed.

### Push Button

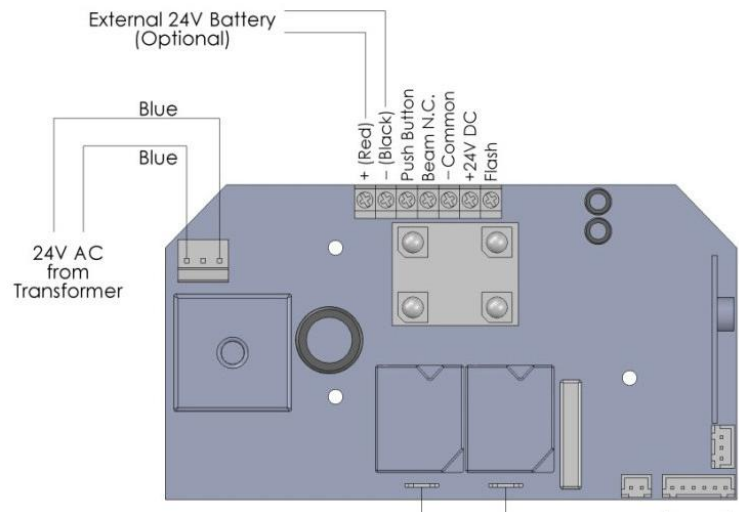
If required, make the connections to the 'Push Button' and '-Common' terminals.

### Safety Beam

If required, make these connections to the '+24V DC', '-Common' and 'Beam N.C.' terminals.

### Back-up Battery (Optional)

Connect the positive wire to '+ (Red)', and the negative wire to '- (Black)'.



## 6. Control Panel



## 7. Programming the operator

(Note: The operator will exit programming if left for 30 seconds.)

(Programming cont.)

Preparation	
With the Carriage Release Lever horizontal, move the door by hand until the Carriage engages with the Shuttle.	
Turn on the power, the Lamp comes on while the Display runs from '99' to '11'.	99 11
The Display changes to '--'. Standby Mode.	--
Setting Open and Close Positions	
Press and hold the SET button, until 'P1' is displayed.	P 1
Press SET again, 'OP' is displayed.	OP
Press and hold the UP button. While opening, 'OP' flashes.	OP
Release the UP button when the open position is reached.	
Use the UP or DOWN buttons to adjust the open position.	
Press SET, and 'CL' is displayed.	CL
Press and hold the DOWN button. While closing, 'CL' flashes.	CL
Use the UP or DOWN buttons to adjust the closed position.	
Press SET, and the door will open and close automatically to establish normal force requirements. Finally '--' is displayed.	OP CL --
Adding eKey Remotes	
Press the CODE button. 'Su' is displayed.	SU
Choose and press a button on the eKey Remote.	SU
Press the same button again to confirm. 'SU' flashes and then '--' is displayed.	(SU) --
Repeat the above steps for additional eKey Remotes. A maximum of 20 may be stored. An attempt to add another will display 'Fu'.	FU
Deleting Remotes	
<b>Caution:</b> This function deletes <u>all</u> remotes	

Press and hold the CODE button for 8 seconds. 'dL' is displayed	dL
Operating Force Adjustment	
Press and hold the SET button, until 'P1' is displayed.	P 1
Press the UP button once. 'P2' is displayed.	P2
Press SET again. The current force setting is displayed. Press UP or DOWN to increase or decrease this value by one step at a time. Maximum is 'F9'; Minimum is 'F1'. Press SET to confirm.	F9 F 1
Default setting is 'F5'	F5
Safety Beam – Enabling and Disabling	
Press and hold the SET button, until 'P1' is displayed.	P 1
Press the UP button twice. 'P3' is displayed.	P3
Press the SET button to show the beam Status. 'H0' means Disabled, 'H1' means Enabled.	H0 H 1
Press the UP button to Enable. 'H1' is displayed.	H 1
Press the DOWN button to Disable. 'H0' is displayed.	H0
Press the SET button to confirm and exit. <b>NOTE:</b> If Safety Beams are <i>not</i> fitted, ensure the above function is Disabled, or the operator will open, but will <i>not</i> close.	H0
Auto-close	
Press and hold the SET button, until 'P1' is displayed.	P 1
Press the UP button three times. 'P4' is displayed.	P4
Press the SET button to show the Auto-close Status. 'b0' means 'No Auto-close', 'b9' is maximum Auto-close.	b0 b9
Press the UP button to increase, or the DOWN button to decrease the delay by 1 minute.	
Press the SET button to confirm and exit.	

## 8. Owner's Guide

### Notes and Warnings:

- Only operate the door when it is in full view.
- Do not allow young children to play with the controls.

- Keep people, pets and property clear of the moving door.
- The door operator is intended for indoor installation.
- The door and operator should be serviced annually.

Trouble Shooting		
In the event of a malfunction, to judge where the fault may lie, use the manual over-ride and test the door by hand, and check if the operator will function with the door disengaged.		
Problem	Possible Cause	Remedy
Noisy Chain	Chain has become loose	Adjust the M8 Nut on the spring
No response from the motor	Mains supply/loose plug, blown fuse	Check the mains. Check/replace the fuse with the same type
Door opens but will not close	Safety Beam (if fitted) is faulty	Test by disabling the beam (see programming)
The motor works from the push button, but not the remote	Remote faulty or battery low	Replace remote battery. If two or more remotes fail, replace the control board.
Remote range is short	Remote battery low	Replace remote battery
Door fails to close fully and re-opens, or door fails to open fully	Operating Force too low	Test the door by hand. Slightly increase the Operating Force (see Programming)

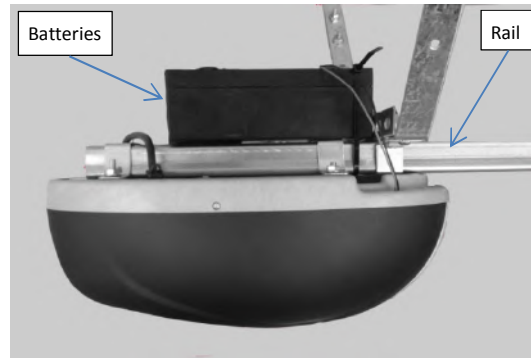
### 9. Battery Back-up (Optional)

Place the two batteries side-by-side above the Rail as shown, and secure them with a Cable Tie.

Connect the short wire from the Red terminal of one battery to the Black terminal of the other.

Connect the Red Wire to the other Red battery terminal, and the Black wire to the other Black battery terminal.

Lead the wires through the access hole and refer to Section 5. 'Electrical Terminals and Connections



### Manufacturer's Warranty

- Hydro Doors and Gates (Pty) Ltd (Hydro) warrants the first purchaser of the digi.one, that the product shall be free of any defects in materials and/or workmanship for a period of twelve months (one Year) from the verifiable date of purchase. Such verification shall include a valid proof of purchase by the first retail purchaser, which shall include, if possible, the Serial number of the motor under warranty. Upon receipt of the product the first purchaser is under obligation to check the product for any visible defects.
- This warranty is applicable to the product if sold and installed in the Republic of South Africa.
- If the product is sold and installed outside the Republic of South Africa, the obligations for repairing this product under warranty will be borne by the distributor of the product in the territory concerned. The terms and conditions of warranties in a territory outside the Republic of South Africa will be available from the distributor in that territory.

#### CONDITIONS:

The warranty shall constitute the sole remedy available under law to the first retail purchaser for any damages related to, or resulting from, a defective part and/or product. The warranty is strictly limited to the repair or replacement of the parts of this product, which are found to be defective.

The warranty does not cover:

- non-defect damage caused by unreasonable use (including use not in complete accordance with this digi.one installation/owner's manual)
- labour charges for removal or re-installation of a repaired or replaced unit
- transport costs incurred in getting the product to Hydro; Hydro will quote for in-situ warranty repairs if requested
- damage to the product caused by lightning, power surges or incorrect installation
- the product if used to automate more than one door at a time
- the product if installed outdoors, including carports
- The product if installed in excessive traffic applications, for example, apartment blocks or parking garages
- any unauthorized, non-Hydro modification to the product or the components thereof; any modification that may be required, must be authorized in writing
- consequential or incidental damage to property or person
- batteries installed in the operator, remote controls or wall console
- Hydro will repair, or at its option replace, any device, which is determined to be defective in materials and/or workmanship, at no cost to the owner for the repair and/or replacement part.
- Defective parts will be repaired or replaced with new or factory rebuilt parts at Hydro's option.
- Warranty repairs shall be effected, provided the product is returned to Hydro at the owner's expense.
- No representative or person is authorized to assume for Hydro Doors any other liability in connection with the sale of this product.
- For warranty service or shipping instructions, please contact Hydro Doors.  
All items must be sent to Hydro Doors for service at the owner's expense.

### Contacts:

#### Hydro Doors & Gates (Pty) Ltd

Head Office: PO Box 635 Florida 1710

Dialling Code: +2711, Tel: 474 9060, Fax: 474 9067

Website: [www.hydrodoors.co.za](http://www.hydrodoors.co.za)

#### Sales Branches:

Johannesburg: Tel: 0861 22 3444 Fax: +27 11 474 9067 Email: [sales@digidoor.co.za](mailto:sales@digidoor.co.za)

East Rand: Tel: +27 11 397 8448 Fax: +27 11 397 8480 Email: [sales@digidoor.co.za](mailto:sales@digidoor.co.za)

Pretoria: Tel: +27 12 653 6399 Fax: +27 11 653 6464 Email: [sales@digidoor.co.za](mailto:sales@digidoor.co.za)

Nelspruit: Tel: +27 13 753 2176 Fax: +27 13 752 2636 Email: [sales@digidoor.co.za](mailto:sales@digidoor.co.za)

Cape Town: Tel: +27 21 933 5556 Fax: +27 21 933 5558 Email: [sales@digidoor.co.za](mailto:sales@digidoor.co.za)

Durban: Tel: +27 31 700 2110 Fax: +27 31 700 2111 Email: [sales@digidoor.co.za](mailto:sales@digidoor.co.za)

Port Elizabeth: Tel: +27 41 367 2874 Fax: +27 41 367 3164 Email: [sales@digidoor.co.za](mailto:sales@digidoor.co.za)