



Basic Operating Instructions for the DG2

This document contains the instructions for Dofygate DG2 Unit and options intended for controlling traffic or people.

Keypad code _____

Phone Number _____

INFORMATION YOU MUST TAKE HEED OF

- THE MAIN ON/OFF SWITCH IS IN THE CABINET
- YOU WILL NEED TO CONNECT THE BATTERY RED WIRE ON RED TERMINAL
- YOU MAY NEED TO TWIST THE SOLAR PANEL TO FACE EAST, WEST OR SOUTH – SEE SOLAR PANEL SECTION
- DO NOT LEAVE THE GATE ON AND UP FOR EXCESSIVELY LONG PERIODS IF THE SOLAR PANEL IS SHADED OR THE BATTERY WILL RUN DOWN
- KEEP THE SOLAR PANEL CLEAN
- IF THE GATE SLOWS DOWN CHARGE THE BATTERIES USING THE CHARGER PROVIDED

FOR HELP 01263 493102 or 07785 352730

To open a Wiska box – being the junction boxes on the back of the gate unit or the battery boxes for the options.



Use a screw driver to turn the corner fixings to point to the '0'. It must be exact.



If the top does not come loose then carefully prize the top off with the flat head **screwdriver in the corners** . DO NOT FORCE THE TOP OFF – check the alignment of the arrows on the corner fixings if it is stiff.

To lock turn the corner fixings to the '1' which is ¼ turn.

WHAT YOUR DELIVERY CONTAINS AND WHERE TO LOOK FOR WHAT

Your delivery should arrive as a single consignment unless otherwise notified. Check the delivery note matches the items. Notify Dofygate of any missing items or any damage immediately.

ASSISTANCE – In the event that you need assistance during installation or after please refer to the manufacture website under ‘other info’ www.dofygate.co.uk or use the contact numbers on the website if you require further help.

SAFETY INFORMATION

General Warnings and Precautions



Do not remove the plastic covers from the gate arm unless the gate is turned off



Do not remove the gate from the gate holder unless the gate has been turned off.



Do not remove or change the battery unless the gate has been turned off.



Do not connect the battery to a mains charger while the battery is connected to the gate



If **horses** are to pass through the gate such that the gate is opened in front of the horse then the horse should be kept back from but in view of the gate the first time it comes across the gate.

Environmental conditions that may affect use

Temperature – The gate has been tested for prolonged periods down to -10 degrees C for 7 days continuously and down to -20 degrees C for 24 hours and continues to operate at these temperatures. Battery output is affected if the battery itself is cooled to below -5 degrees C. This means that in extreme conditions the energy reserve of the battery will be up to 30 % less than expected. Where the gate becomes frozen in wet conditions it will normally break the frost grip but in some circumstances may need to be 'knocked' upwards.

Special note on Infra-Red options. Where auto close and/or auto open is in use then freezing wet weather may interfere with normal operation. Where this happens wipe the lens.

Rainfall – Wet weather will have no effect on the operation of Dofygate. Should the weather be so severe that flooding occurs around Dofygate then we recommend that the battery is removed if the water level is likely to reach cabinet level.

Wind – Wind speeds in excess of 50mph may affect the operation of Dofygate depending how the wind strikes the gate when it is moving from an open position to a closed position.

Sunshine – All exterior components are UV stabilised or unaffected by sunshine. This is a sunshine powered device so prolonged periods when the gate is left turned on with no available sunshine to recharge itself will result in failure to operate. The solar panel should be turned to point South, West or East but not North.

Contents

These are the Original Instructions for Dofygate DG2 Unit intended for controlling traffic or people.

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1.0 Assistance Information

Sales 01263 493102

Technical help 01263 493102

Out of hours help 07785 352730

Alternative number 01263 768142

E Mail jim@dofygate.co.uk

For operational information including tuning in fobs or pairing gates then please try our web page www.dofygate.co.uk and go to 'useful information' tab.

Dofygate Ltd is located at Manor Farm,
Calthorpe,
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NR11 7QR

1.1 Unpacking a pallet delivered gate – no stand

- Remove shrink wrap. If a knife or blade is used be careful not to cut through to the cabinet or gate bars.
- Take all the boxes off the pallet before removing the gate units.
- Loosen and remove the cap heads fixing the gate to the fitting attached to the pallet. This will allow you to lift the gate out of the bracket.
- Lay the gates flat on a surface using the cling to protect the cabinet.
- Remove the post plates and adjustable bracket from the pallet.



1.2 Unpacking a pallet delivered gate – with stand

- Remove shrink wrap. If a knife or blade is used be careful not to cut through to the cabinet or gate bars.
- The gate will now be free of the stand and is located into mther cross member of the pallet. **DO NOT MOVE THE PALLET IN THIS CONDITION.** The gate needs the stand for stability.
- Remove the stand from the pallet – you may need to loosen one of the coach screws holding the pallet cross member
- Place the gate in the adjustable gate holder
- Use the Cap head screws held in the maintenance pack toolbox lid to secure the gate unit in the adjustable gate holder
- Adjust as necessary to level usinbg a 6mm hex key.

2.0 Accessories

- Extra fob keyring type –any gate
- Extra fob tough type –any gate
- Extra fob long range (200m) type – any gate
- Keypad
- Automatic opening
- Telephone opening
- Fixed radio button
- Extra post fixing – allows the gate to be relocated easily
- Battery – 7.0Ahr12V lead acid AGM battery for use with gates and telephone solar unit
- Battery – 2.8Ahr12V lead acid AGM battery for use with keypad, auto open and solar booster unit
- Battery – 2.2Ahr6V lead acid AGM battery for use with keypad

3.0 Setting up instructions

Order of fitting

1. Fit U shaped plate to post
2. Fit the adjustable bracket to plate
3. Tighten at least one of the cap head bolts
4. Drop gate unit into adjustable bracket
5. Level gate
6. Fit auto close if not already fitted
7. Fit any other wired in option
8. Fit any other wireless option

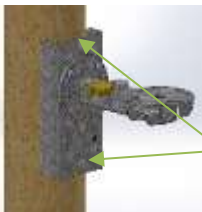
Fixing heights

Fixing height as measured from ground level to top of post plate.



Traffic	mostly HGVs or large vans	800mm
Traffic	mix of all vehicle types	700mm
Traffic	mostly cars	600mm

Fixing post plates

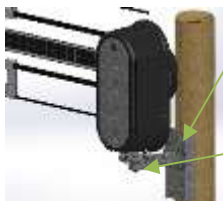


Using the above guidelines fix the first post plate using coach screws (10mm * 120mm), threaded rod (10mm) or suitable masonry fixing with a 8-10mm bolt. The fixing screw / bolt passes through the central hole located top and bottom of the post plate.

Getting post plates level

If you have a laser leveller great but if not tie a string or use a long straight bar between the posts at the level of the top of the first post plate and using a spirit mark the posts accordingly. The gates can be set to follow the ground contour up to 5 degrees off level.. Fix post plates using coach screws provided into a wooden post or the coach bolts provided into a metal post.

Fixing Adjustable Bracket and gate unit



Using the cap head bolts provided fix the adjustable bracket to the post plate ensuring the horizontal circular plate is about level. Tighten one convenient cap head properly leaving the others loose. Place gate into the adjustable bracket and fix with the cap head bolts.

Insert Battery

Remove front cover using the cover key and place battery into the battery holder small end down with the terminals facing the actuator (electric gate lifting motor).

Make sure the toggle switch above the battery holder is up (off). Attach the colour coded power wires by attaching the earth wire to the black coded terminal and the red wire to the red coded terminal.

Lining up gates

- Remove front cover from both gates and turn them on using the internal toggle switch above the battery – down is on.
- Use the supplied pre-tuned fob to operate the gate as required. (see fob instructions). NOTE if you have on gate pair then the red buttons are tuned in to your gate.
- First ensure the gates line up and are square across the gateway. Tighten the cap head bolts holding the gate to the adjustable bracket. (Horizontal disc)
- While holding the gate so it cannot drop loosen the one tight cap head holding the adjustable bracket to the post plate. (vertical disc).
- Adjust gate arm to level as necessary. Tighten all cap head bolts holding the adjustable bracket to the post plate.

Solar Panel

Where the solar panel is fitted to the gate arm :- Holding the solar panel with both hands twist so that it faces East South or West. IMPORTANT NOTE – twist the panel downwards under the centre back NOT over the top. Choose the most unobstructed position. Do not apply to much angle or the panel can snag when the gate is opened.

Where the solar panel is vertical and attached to the cabinet :- Twist to the appropriate angle and operate gate to ensure the gate does not snag the panel when it opens

Solar and Battery care

NOTE – IF THE GATE IS TO BE LEFT UP DURING THE DAY THEN THE SOLAR PANELS SHOULD BE ALIGNED IN THE UP POSITION FOR THE SUN RATHER THAN THE DOWN POSTION.

The battery will tell you when it is suffering. If the gate is moving slower than normal remove the battery and charge it using the charger supplied. Battery life will vary. **We recommend changing the batteries for new around December providing a pair of backup batteries.** These can be supplied by us, any local battery specialist or from the internet and should be NP7-12 SLA AGM sealed lead acid batteries.

NOTE – IF A BATTERY IS LEFT IN A LOW VOLTAGE CONDITION FOR ANY LENGTH OF TIME ITS ABILITY TO REACH FULL CHARGE AGAIN WILL BE COMPROMISED. IF THE BATTERY DOES NOT HOLD ITS CHARGE FOR VERY LONG THEN REPLACE WITH A NEW BATTERY.

4.0 Gate operating Instructions

Fob operation

All Dofygate fobs have 4 button arranged in colour coded pairs. The gate will open from either the top red (1) or top green (2) buttons depending which pair the gate is tuned in to. The gate will close using the appropriate bottom button.

NOTE we normally send gates out tuned into the red buttons.

Obstruction

If the gate meets an obstruction while in motion it will stop or reverse back to its previous stop point.

Emergency gate opening procedure

Push the gate open at the mid (elbow) point so that it swings on the gate axis. The impact clutch will give way and allow the gate to move through 90 degrees and lock in that position.

Impact clutch

Located in the base of the cabinet is a mechanism that will allow the gate to swivel away from a force that is sufficiently large that damage to the gate may occur.

NOTE:- THE SPRING PRESSURE ON THE IMPACT CLUTCH CAN BE ADJUSTED TO PROVIDE MORE OR LESS RESISTANCE TO BEING PUSHED OPEN.

To reset to the working position simply push back and will lock into its working position. – If it does not then the cap heads holding the gate into the adjustable fitting are loose – re-adjust as required.

5.0 Fob

Tuning in an extra fob

1. Have the fob to hand before starting
2. Turn both gate units off,
3. Locate the internal tuning button. It is yellow just above the battery,
4. While holding down the tuning button switch the gate on with the internal toggle switch.
5. Keep the tuning button pressed for 1-2 seconds.
6. Release the tuning button.
7. The red LED in the cabinet just below the internal Antenna flashes slowly
8. On your fob press orange button number 1
9. The LED in the cabinet flashes quickly
10. Press the same (orange no 1) fob button again.
11. Press the tuning (yellow internal) button to complete and lock in the fobs.
12. Press the tuning button a second time to complete
13. Check the fob is tuned in by operating the gate with fob.
14. Turn this unit off
15. Repeat this procedure with the other gate unit.
16. Tune in other fobs by carrying out steps 3 – 8. So multiple fobs can be tuned in one after the other then locked in using with steps 9 – 11
17. IF THIS IS YOUR SECOND GATE THEN THIS PROCEDURE SHOULD BE CARRIED OUT USING THE GREEN BUTTON NUMBER 2 INSTEAD OF ORANGE BUTTON NUMBER 1
18. WE DO HAVE GREEN REFLECTIVE LOGO LABELS AVAILABLE FOR THE GATE CENTRE TO ASSIST USE.



Changing the fob battery –

- Both the standard fob and the keyring fob take a CR2032 Lithium cell battery.

- With the standard fob you will need to scrape away some fixing compound with a knife before using some long-nosed pliers to slide the battery out.
- With the keyring fob simply remove back and replace.

Special instruction booklet provided for this option.

5.6 Fixed radio button

Where the gate is supplied with automatic closing then the remote fixed button unit will have one button.

Where the gate is supplied in non-auto (standard) form as is usual with any gate containing or excluding animals then the remote button box will have an up and a down button.

The fixed radio button contains a transmitter and a PP9 battery. The battery will need replacing after a years use.



5.7 Stands

Note

The stand has 3 points of contact with the ground – two behind the weight tray and one on the front leg.

Weights

When the gate mounting bracket is fixed using the bottom set of fixing holes 1 weight is required.

When the gate mounting bracket is fixed using the middle or top set of fixing holes 2 weight is required.

Base

All stands should sit on firm ground or concrete. Where firm ground is not available then use a paving slab as the base.

The ground does not need to be exactly level but does need to be flat. Remove any areas that are not flat to allow the stand to sit firmly.

Adjustments to level barrier arm

The Adjustable bracket allows the gate to be levelled.

4 cap heads on the post end of the adjustable bracket can be loosened to allow movement in the vertical dimension
cap heads under the cabinet end allow movement in the horizontal dimension.

Ensure all cap heads are properly tightened after adjustment.

Use the adjustable bracket to adjust the gate as necessary.

Check correct operation.

6.0 Maintenance

All bearings and rotating parts are designed to be maintenance free.

Clean the solar panel regularly. A small amount of dirt can have a significant effect on power production from the panel.

Check alignment of the solar panel.

Check any shading to the panel from vegetation.

Battery

Replace and recharge batteries if

- If the gate slows down
- The sensors are clear and the gate is up but will not shut

Replace and discard responsibly, batteries if

- The battery does not appear to hold its charge for more than a week or two
- The gate is not acting normally after a battery has been recharged (damaged battery cell)
- If the battery is dropped on to a hard surface it is probably damaged despite appearing to work initially.

Always recharge a battery straight away. If a battery is left in a run-down state for too long it will lose some capacity. Ensure the charger switch is set to 12 volts as delivered.

Charge a battery with the charger provided for 24 hours then remove from the charger and store.

Battery spec

Sealed Lead Acid (SLA) Absorbent Glass at (AGM) 12 volt 7 Amp Hour battery usually defined as

12v 7Ah AGM

This is a standard size and the following batteries are the same size and can be used instead

12v 7.2Ah AGM

12v 7.5Ah AGM

12v 9.0Ah AGM

DO NOT DISCARD BATTERY IN NORMAL WASTE – RECYCLE VIA A BATTERY SUPPLIER OR LICENCED RECYCLE CENTRE

7.0 Storage

If the gate will not be used for a period exceeding 1 month then the battery should be disconnected.

The gate may be left in the Open or closed position but it is recommended that it is left in the closed (down) position if left attached to a gate post. If the gate is left in the open position for prolonged periods it is recommended that the gate is turned off using the switch inside the cabinet. This is because in the open position the solar panel is more likely to be in some form of shade.

9.0 Troubleshooting

Symptom	Problem	Solution
Gate moves slowly	Low battery	Charge or exchange battery
Gate does not close	Low battery	Charge or exchange battery
	Dirty sensor	Clean sensor
	Obstruction	Remove obstruction
	Damaged sensor	Exchange sensor
	Auto open has low battery	Charge or exchange battery
	Keypad has low battery	Charge or exchange battery
	Fixed radio button has low battery	Charge or exchange battery
Gate does not open	Low battery	Charge or exchange battery
	Loose axle mounting	Call Dofygate
	Damaged motor	Check motor mounting points
	Broken mainspring	Remove battery and observe
Gate does not respond to fob	Low fob battery	Change fob battery
	Water damaged fob	Exchange fob
	Damaged cabinet button	Exchange button and retune to fobs and options
End section misaligned	Interference	Pull or push into position
	Cable off	Remove cover and reset cable
Battery does not hold charge	Damaged battery cell	Replace battery 12V 7Ahr SLA AGM

Battery Health Guide		
>15.20v	high - should only be apparent for short periods in direct	Leave in place check again after 12 hours
>13.20v	very good battery charge	Leave in place
>12.4v	battery OK	Leave in place
>12.2v	OK but needs some sun - check again after 3 days	Leave in place
>12.00v	low battery charge	remove and charge
>11.80v	very low battery charge	remove and charge
<11.80v	consider renewing battery	If battery does not hold voltage after charging then discard battery
Gate unit battery	12V 7.0Amp hour AGM SLA	Supplied
	12V 7.2Amp hour AGM SLA	Alternative option
	12V 7.5Amp hour AGM SLA	Alternative option
	12V 9.0Amp hour AGM SLA	Alternative option
Solar Boost 12V	12V 2.9Amp hour AGM SLA	
Solar Boost 6V	6V 4.5 Amp hour AGM SLA	
Fob - standard	CR2032 Lithium cell	
Fob - keyring	CR2032 Lithium cell	
Fob - long range	3 * AAA Alkaline	
Fixed radio button	PP9 9v Alkaline	

DOFYGATE MAINTENANCE SCHEDULE		
Call 01263 493102 or out of hours 07785 352730 / 01263 761798 E:jim@dofygate.co.uk		
Monthly		Date last completed
Task	Description	Notes
Clean	Using a soft cloth clean sensor and solar panels	
Battery Voltage	Check voltage across the battery terminals. 12.2V + leave in place. 11.5V to 12.2V recharge battery. Under 11.5 volts replace battery.	
Plastic end caps	Check plastic end caps on gate bars are in place.	
Accidental impact clutch	Move gate through 90 degrees by pushing in a horizontal direction (parallel to road) on the inner bar to release clutch. Pull back into position.	
Carbon Fibre Arms	Visually inspect carbon fibre gate bars for damage.	
General operation	Check gate operation. Both up and down movements should be complete ie the gate is fully up or fully down.	