GL BAL
ACCESS

Inverter Drive

Sliding Gate
Operator

Instruction Manual

2200

IMPORTANT NOTICE FOR THE INSTALLER

ATTENTION! To ensure Safe operation, it is important that you read all the instructions included with this unit. Incorrect installation or incorrect use of the product could cause serious harm.

1. Carefully read the instructions before beginning to install the product.
2. This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the good condition/operation of the product and/or be a source of danger.
3. Global Access declines all liability caused by improper use or use other than that for which the automated system was intended.
4. Do not install the equipment in an explosive atmosphere: the presence of inflammable gas or fumes is a serious danger to safety.
5. Global Access is not responsible for failure to observe Good Technique in the construction of the closing elements to be motorised, or for any deformation that may occur during use.
6. Before attempting any job on the system, cut out electrical power.
7. Make sure that the earthing system is perfectly constructed and connect metal parts of the closure to it.
8. **Safety devices e.g. Photo Beams and edge sensors protect any danger areas against mechanical movement risks, such as crushing, dragging, and shearing and must be fitted.**
9. Use of at least one indicator-light is recommended for every system, as well as a warning sign adequately secured to the frame structure, in addition to the safety devices mentioned above.
10. Do not in any way modify the components of the automated system.
11. The installer shall supply all information concerning manual operation of the system in case of an emergency.
12. Do not allow children or adults to stay near the product while it is operating.
13. Keep remote controls or other pulse generators away from children, to prevent the automated system from being activated involuntarily.
14. Transit is permitted only when the automated system is idle.
15. The user must not attempt any kind of repair or direct action whatever and contact qualified personnel only.
16. Check at least every 6 months the efficiency of the system, particularly the efficiency of the safety devices
17. Anything not expressly specified in these instructions is not permitted.

Specifications

Power supply	230VAC - 50Hz
Power Absorption (A)	2.2
Motor Supply	230VAC three phase
Motor power	750W
Motor RPM	1400
Reduction ratio	1/38
Max Speed	18m/min
Working Temperature	-20C <> +60C
Duty cycle	Intensive (70%)
IP rating	44
Max thrust	1600N
Max gate weight	2200KG

Dimensions
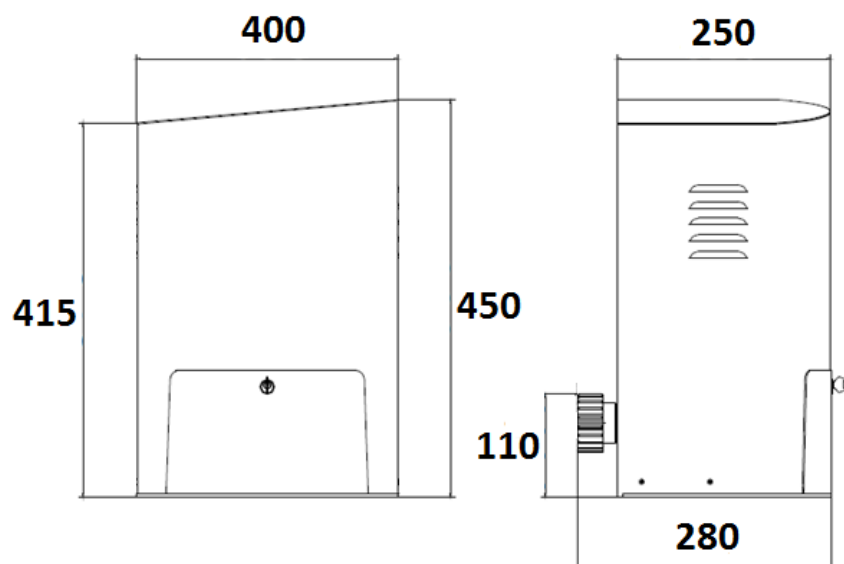
General Information

This instruction booklet refers to the Global Access inverter drive sliding gate operator.

On initial setup the inverter will learn the travel of the gate by searching for and pushing against the open and closed physical ground stops.

⚠️ **Important!** Due to the way the gate motor operates, heavy duty ground stops and safety devices e.g. - photo beams and/or edge sensors, must be fitted.

Installation

Mount the gate operator a level surface and position the gear rack ensuring that there is a space of approx 1mm between the pinion and the rack
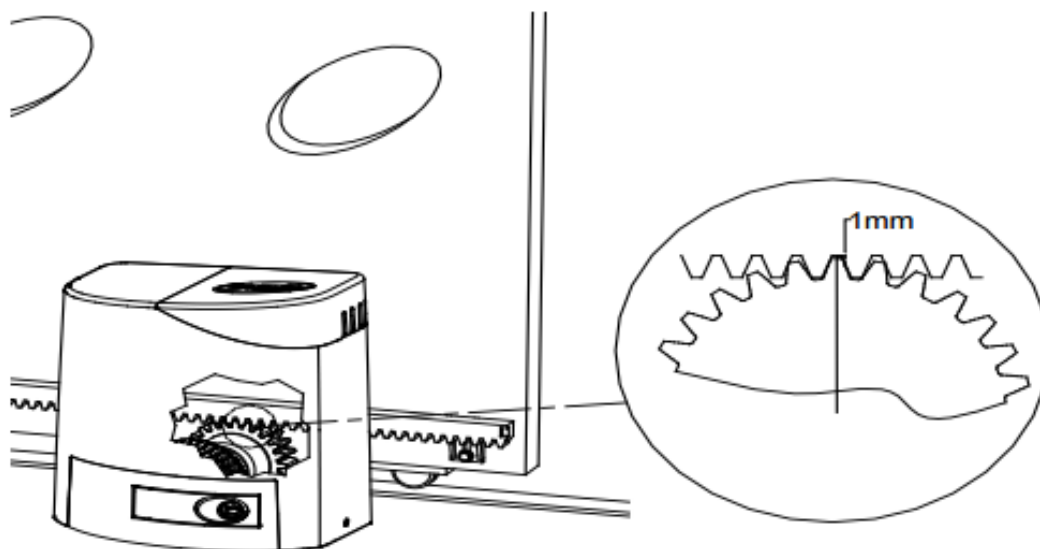

Fig. 4

Power Supply Connection

The connection for the mains power supply is the 2 pole circuit breaker mounted on the DIN rail

IMPORTANT! The unit may not function if connected to a residential Residual Current Device (RCD). The motor should be hard wired to a circuit breaker.

CAUTION! Do not touch live components or power connections until 10 minutes after disconnecting the inverter from the supply voltage. Dangerous voltages may still be present.

Motor Direction

The default movement when setting up is to open. If the gate closes first, disconnect the power and swap the motor wires **W (Blue)** and **U (Black)** located in the terminal block under the inverter.

Manual Release

To manually move the gate unlock and remove the front panel then unlock and pull on the manual release lever.
To reengage the motor push the manual release lever closed and lock it and push on the gate to reengage the gearbox. Placing the motor into manual operation triggers the stop circuit.
(Once the stop circuit has been broken the next cycle will be at slow speed).

Terminals

The input/output terminals are located on the side of the mounting bracket next to the inverter.

1-	Reset
2-	O/S/C
3-	Stop
4-	Close
5-	Ped
6-	Safety
7-	Common (for terminals 1 to 5 only) ***Refer below**
8-	+24V DC for accessories
9-	0V DC for accessories
10-	+24V DC for flashing light
11-	0V DC for flashing light

⚠️ ***IMPORTANT- Do <u>NOT</u> use terminal 7 (Common) to power accessories.**

Terminal 6 is the common for terminals 1 to 5. Terminal 9 (0V DC) is the common for 24V DC accessories.

- A closed contact between terminal 2 (O/S/C) and terminal 6 (common) will open and close the gate depending on chosen logic.

- A closed contact between terminal 5 (Pedestrian) and terminal 7 (common) will open the gate to the percentage set at parameter n13. Pedestrian mode is auto close <u>only</u>.

- Stop devices are linked in series through terminals 3 and 7 (common). If no stop devices are present terminal 3 must be linked to terminal 7.

- A closed contact between terminals 4 (Close) and 7 (common) will close the gate

- Safety devices are linked in series through terminals 6 (Safety) and 7 (common). **Safety devices must be fitted**.

KEYPAD

↑ ↓	Use UP/DOWN to select symbols and change values.
out / Enter	Use ENTER/OUT to activate and deactivate the symbols or parameter menus
RUN	Use "RUN" to start the drive.
STOP RESET	Use "STOP/RESET" to reset errors and stop the drive.
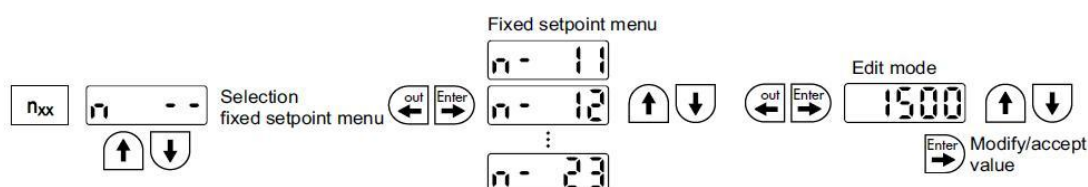
To change a parameter

- Press the **up** or **down** arrow until the display shows **n --** then press **enter**.
- Press **up** or **down** to select the parameter to be changed then press **enter**.
- Press **up** or **down** to select the required value then press **enter**.
- Press **out** to scroll back through the menus

Pause time

Rotate **dial on keypad** - adjustable from 1 to 120 second

Parameters	
n11	High Speed opening 2750 rpm max
n12	Low Speed(deceleration) opening and closing 400rpm (default)
n13	% Partial opening position
n21	Logic
	1=Timer
	2=Security
	3=Flip Flop
	4=Step by Step
	5=Step only
	6=AP Semi auto
n22	High Speed close 2750 rpm max

Input status

The status of the inputs can be checked by the following
- Press the **up** or **down** arrow until the display shows **P ---** then press **enter**.
- Press **up** or **down** to select **P- 39** then press **enter**.
- A line at the bottom of the number segment is an open contact and a line at the top is a closed contact.
- Press **out** to scroll back through the menus

For the motor to operate the display should look like the picture below.

1. Reset
2. O/S/C
3. Stop
4. Close
5. Ped
6. Safety

1 2 3 4 5 6

↑ (Line up) Closed contact
↓ (Line down) Open contact

Initialisation (Learn Cycle)

- Take the gate to the closed position
- Press the **RUN** button located on the keypad of the inverter
- Setup is performed by pressing the button on the transmitter, if included, or by a trigger between terminal 1 (O/S/C) and terminal 6 (common).
- The default movement when setting up is to open. If the gate closes first, disconnect the power and swap the motor wires **W (Blue)** and **U (Black)** located in the terminal block under the inverter.
- The gate will open and close slowly, calculating the distance between the stops.

The gate is now operational.

Note! (The first movement after a setup, power interruption or having been moved manually is in slow speed)

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Reset

If the motor needs to be initialised **after** the first setup, bridge a wire between terminals 1 and 7 for **5 seconds**. The inverter will relearn the travel limits.

Maintenance

Maintenance should be performed every 6 months with attention paid to the open and closed physical stops, gear rack and the operation of safety devices.

LOGICS

Logic "Timer"	O/S/C	Ped	Close	Stop	Safety device
Closed	Opens and closes after pause	Partial opening close after pause	No effect	Open Disabled	No effect
Opening	No effect	No effect	Closes	Stops operation	No effect
Open in pause	Reset timer	Reset timer	Closes	Stops operation	Reset timer
Closing	Opens	Opens	No effect	Stops operation	Opens
Stopped	Starts last move in slow	No effect	Closes in slow	No effect	No effect

Logic "Security"	O/S/C	Ped	Close	Stop	Safety device
Closed	Opens and closes after pause	Partial opening close after pause	No effect	Open Disabled	No effect
Opening	No effect	No effect	Closes	Stops operation	If toggled off then on – stops then close immediately
Open in pause	Reset timer	Reset timer	Closes	Stops operation	If toggled off then on - closes
Closing	Opens	Opens	No effect	Stops operation	Opens
Stopped	Starts last move in slow	No effect	Closes in slow	No effect	No effect

Logic "Flip Flop"	O/S/C	Ped	Close	Stop	Safety device
Closed	Opens	Partial opening close after pause	No effect	Open Disabled	No effect
Opening	Closes	No effect	No effect	Stops operation	No effect
Open	Closes	Reset timer	No effect	Stops operation	No effect
Closing	Opens	Opens	No effect	Stops operation	Opens
Stopped	Starts last move in slow	No effect	Closes in slow	No effect	No effect

Logic "Step by Step"	O/S/C	Ped	Close	Stop	Safety device
Closed	Opens	Partial opening close after pause	No effect	Open Disabled	No effect
Opening	Stops	No effect	No effect	Stops operation	No effect
Open	Closes	Reset timer	Closes	Stops operation	No effect
Closing	Stops	Opens	No effect	Stops operation	Opens
Stopped	Starts last move in slow	No effect	Closes in slow	No effect	No effect

Logic "Step Only"	O/S/C	Ped	Close	Stop	Safety device
Closed	Opens	Partial opening close after pause	No effect	Open Disabled	No effect
Opening	No effect	No effect	No effect	Stops operation	No effect
Open	Closes	Reset timer	No effect	Stops operation	No effect
Closing	Opens	Opens	No effect	Stops operation	Opens
	Starts last move in slow	No effect	Closes in slow	No effect	No effect

Logic "AP Semi auto"	O/S/C	Ped	Close	Stop	Safety device
Closed	Opens and closes after pause	Partial opening close after pause	No effect	Open Disabled	No effect
Opening	No effect	No effect	Closes	Stops operation	No effect
Open	Stays open	Reset timer	Closes	Stops operation	No effect
Closing	Opens	Opens	No effect	Stops operation	Opens
	Starts last move in slow	No effect	Closes in slow	No effect	No effect