



BLACKedition **GARAGEDOOR**OPERATOR

Installation Guide

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SAFETY INSTRUCTIONS

Before you begin installing the door operator, please read thoroughly these instructions, keep the manual for future reference or pass it on to the subsequent owner of the door.

The door operator has been designed for safe use in operation but safety can only be assured if the safety instructions are strictly adhered to during the installation and during use.

- The door should be balanced and any obstacles removed. Springs, guides and other moving parts should be in good condition.
- Do not wear jewellery or loose clothing during the installation.
- During electrical connection, local building and electrical regulations should be adhered to, this device complies with protection class 2 and does not require earthing.
- Once installed the auto reverse system should undergo a test, upon contact with a 50mm solid object from the ground, the garage door should stop and then re-open.
- Warning signs should be used to warn of door opening and closing.
- Do not allow children or untrained users access to the controls including radio controls.
- Always watch a moving door keeping people away from the door until fully open or closed.
- Frequently examine all moving parts paying particular attention to the cables, springs, mountings looking for wear and tear.
- Do not use if any fault or mechanical damage is evident as this may cause injury.
- Garage door openers should only be installed by fully trained installers.
- Service and repairs should only be carried out by fully trained installers.
- The courtesy light and external light (if connected) will illuminate on every open or close operation.

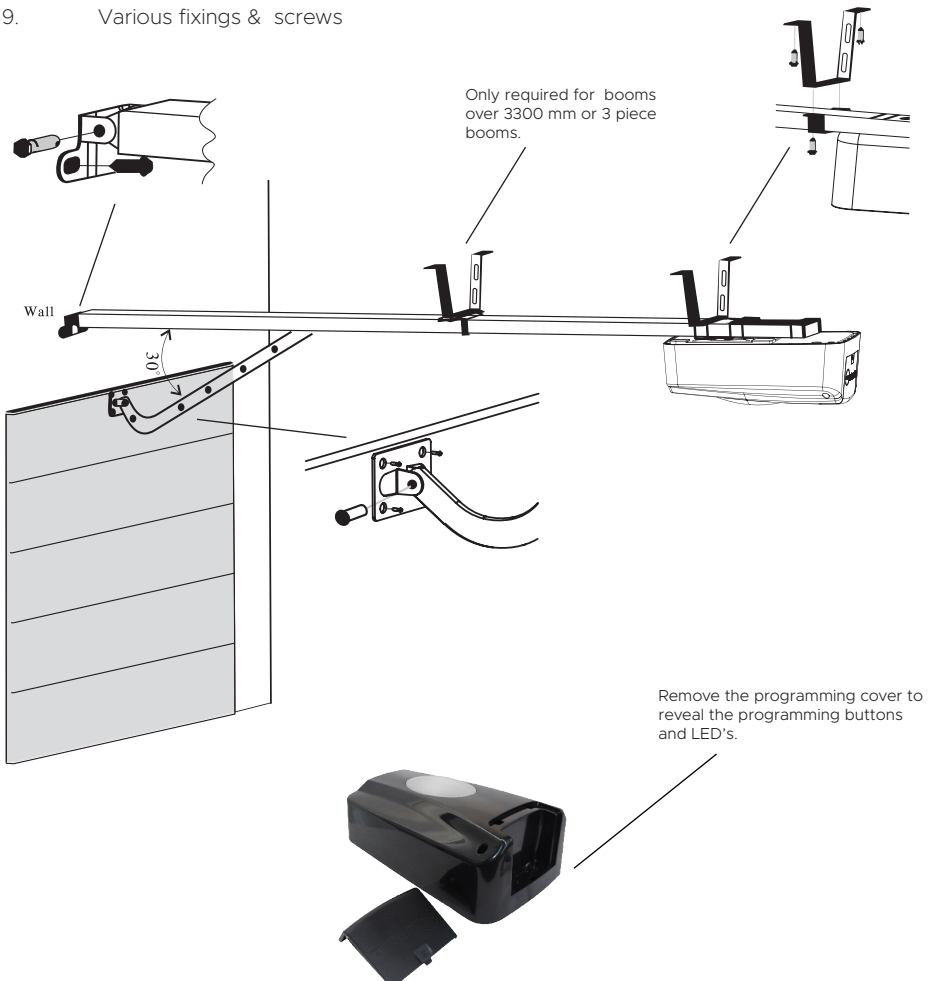
PARTS LIST

Door Operator Package

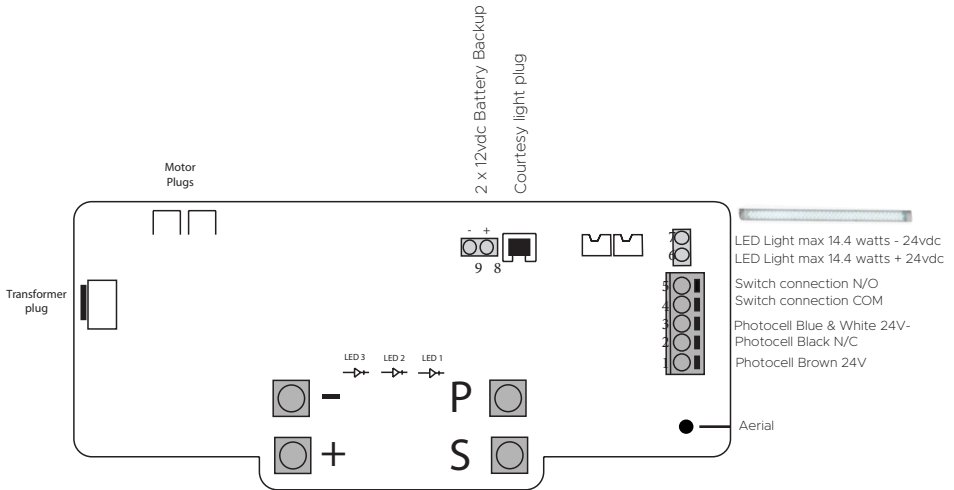
1. Garage door opener
2. Two transmitters
3. Installation manual
4. Curved door arm
5. Two metal fixing bars
6. Two U brackets
7. Door arm fixing bracket
8. Above door boom bracket
9. Various fixings & screws

Boom Package

1. One piece or three piece boom
2. Carrier with cord release
3. Motor drive adapter
4. Two slide over brackets (3 piece boom only)



CONTROL BOARD LAYOUT



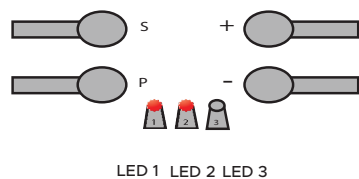
LED light connections: The Nrg Automation 1 mtr light strip can be connected to the terminals. 6 (+ 24vdc) & 7 (- 24vdc). The LED will illuminate as a courtesy light and can also be turned on or off using the mode 3 function on the transmitter.

Two 12vDC (total 24vdc 7.0Ah)batteries can be connected in series to act as a battery backup connected to the two battery terminals. The number of operations depends on the size of the batteries. A two piece battery pack with 7 amps (24vdc) can provide approximately 40 complete cycles. The batteries are trickle charged during normal use.

Terminal Wiring

1. Photocell 24V+ (Brown)
2. Photocell Black (N/C)
3. Photocell 24V - (Blue & White)
4. Switch connection COM
5. Switch Connection N/O
6. LED light strip 24vdc +
7. LED light strip 24vdc -
8. Battery backup 24vdc +
9. Battery backup 24vdc -

Programming Buttons / LED's



LED 1 LED 2 LED 3

INSTALLING MOTOR & BOOM

Warning: incorrect installation could lead to severe injury.

Before installing the boom and GDO ensure the door is in good working order and correctly balanced.

After installation ensure the door automatically reverses when it makes contact with an object placed on the floor at a level of 50mm.

Ensure parts of the door do not extend over public footpaths or roads during operation

Connecting the boom

1. Connect the boom bracket above the door and secure.
2. Offer the boom up to the boom bracket and secure using the 80mm screw (with HEX head)
3. Using the metal mounting strap and support bracket secure the boom to the ceiling at the mid point (only for booms longer than 3300mm) or 3 piece booms
4. Using the metal mounting strap and U-bracket secure the boom to the ceiling at the motor end.

Attaching the Motor to Boom:

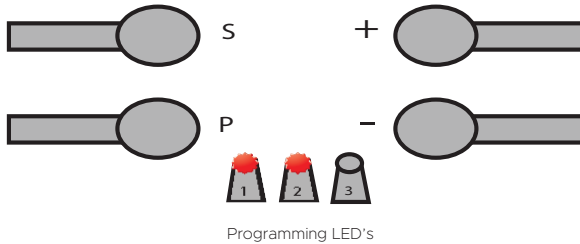
1. Insert the splined BRASS expander joint into the carrier drive system (may be installed already to the boom carrier).
2. Offer the motor to the Boom inserting the drive into the BRASS expander drive joint.
3. Using the two U-type brackets and 6 x 15mm screws, secure the motor to the boom.

Connecting the Boom to the Door

1. Install the door arm fixing bracket to the top of the door.
2. Connect the straight arm of the boom to the curved arm and insert into the door arm bracket (see image on page 3)
3. Secure using the 8 x 25mm drive pin and clip.
4. Ensure the angle between the Boom and the drive arm is 30 degrees when the door is fully closed.

SETTING MOTOR LIMITS

Remove the end programming cap with the NRG Automation label to reveal the programming panel.



Programming the OPEN and CLOSE limits and FORCE learning.

Step 1. Open Limit:

1. Press P button for 5 seconds - LED's 1, 2 & 3 will illuminate, then release the P button
2. Press + button once. LED1 will flash
3. Press and hold + button to open the door keeping it pressed until the desired OPEN position is reached before releasing the + button.
4. Press P button to save OPEN limit position , LED 1 will go out and LED 2 will flash to enter CLOSE limit setting.

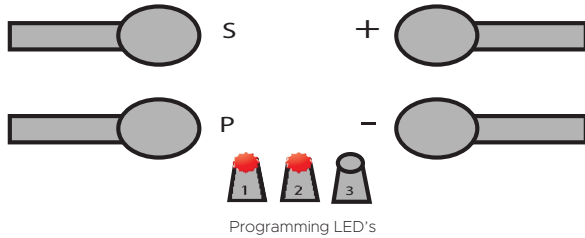
Step 2. Close Limit:

1. Press and hold - button to close the door to the desired close position before releasing.
2. Press P button to save the DOWN limit position.
3. LED 2 will go out, LED 3 will flash to enter FORCE learning program.

Step 3. Force Learning

1. Press + button and the door will open automatically to the OPEN limit.
2. Press - button and the door will close to the CLOSE limit position.
3. Press P button to save this setting, LED 3 will go out, courtesy light will come on.
4. The reversing force is automatically set.

PROGRAMMING AUTOCLOSE ALARM



Automatic Closing (default set to OFF)

1. Press P button for 5 seconds, LED's 1, 2 & 3 will illuminate.
2. Press + button twice, LED 1 & 2 will flash to enter programming mode.
3. Press + or - button to select auto close time in accordance with the chart below.
4. Press P button to confirm auto close time.

LED Status

- LED 1, 2 & 3 Flash
- LED1 flashes once every 3 seconds
- LED 1 Flashes twice every 3 seconds
- LED 1 Flashes 3 times every 3 seconds
- LED 1 Flashes 4 times every 3 seconds
- LED 1 Flashes 5 times every 3 seconds
- LED 1 Flashes 6 times every 3 seconds
- LED 1 Flashes 7 times every 3 seconds
- LED 1 Flashes 8 times every 3 seconds

Closing Time in Seconds

- Not active
- 30 seconds
- 60 seconds
- 90 seconds
- 120 seconds
- 150 seconds
- 180 seconds
- 210 seconds
- 240 seconds

If auto time close is selected, before the door starts to close the courtesy light will flash and the alarm sound for 20 seconds. When the door starts to close, the courtesy light remains on for 3 minutes.

Alarm Programming:

1. Press P button for 5 seconds, LED's 1,2 & 3 illuminate
2. Press + button 3 times, LED 2 & 3 flash
3. Press + to check the status of the Alarm i.e on or off.
4. Press + or - to toggle between alarm on or alarm off.

LED Display Status

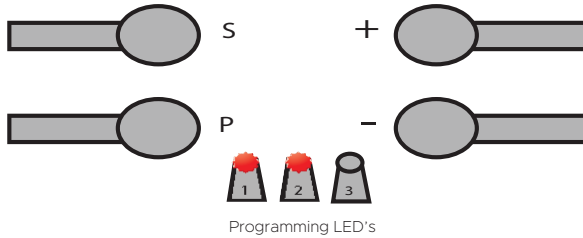
- LED 1 Flashes once per 3 seconds
- LED 1 Flashes twice every 3 seconds

Function

- Alarm ON
- Alarm OFF

If the alarm is ON and auto time close function is OFF, the alarm will sound when the door has been left in the fully open position for more than 10 minutes. It will then beep for 30 seconds every 10 minutes until the door is closed.

PROGRAMMING REVERSING FORCE



Force Reverse Programming (default set to level 2)

1. Press P for 5 seconds, LED 1, 2 & 3 will illuminate
2. Press + 4 times, LED 1 & 3 will flash
3. Press + to check the current force setting level.
4. Press + or - to toggle between force level 1 and 2.
5. Press P to save the force level setting (courtesy light will illuminate)

LED Status

- LED 1 Flashes once every 3 seconds
- LED 1 Flashes twice every 3 seconds

Meaning

- Level 1 More sensitive
- Level 2 More powerful

Note: Both these two forces meet the very latest EU norms for Force.

**WARNING: This menu should only be used by trained professional installers
Force reversing Programming (Professional installers ONLY).**

If the garage door will not fully close and the operator requires more force to close please get in touch with our technical department.

We advise that ONLY professional installers adjust the force level setting.

If a level above 2 is required we would suggest additional safety devices are fitted and that force level testing is carried out after the force is set. More information on setting the reversing force above level 2 can be obtained by contacting the Nrg Automation technical office (professional installers only)

PROMMING 2000 CYCLES COUNTER ALARM

2000 Cycles Maintenance Counter - Alarm

Once the operator has reached 2,000 cycles, the built in alarm will sound and the courtesy light will flash. The alarm and lights will continue to flash until cancelled. This serves as a reminder to the user to carry out the annual maintenance inspection and service.

To cancel the alarm do one of the following:

1. Press and button on the transmitter for 3 seconds
2. Press P button for 5 seconds (installer only)
3. Power off, then on the operator

To activate or de-activate the cycle alarm:

1. Press P button for 5 seconds, LED 1,2 & 3 are illuminated
2. Press + five times, LED 1, 2 & 3 flash
3. Press + to check the status of the alarm setting
4. Press + or - to toggle between alarm on or off.
5. Press P button to save the setting (courtesy light will illuminate)

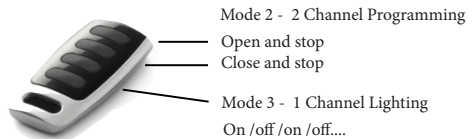
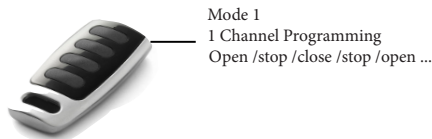
LED Status	Meaning
LED1 Flashes once every 3 seconds	Alarm ON
LED 1 Flashes twice every 3 seconds	Alarm OFF

PROGRAMMING TRANSMITTERS

Programming Transmitters: Max 40 Channels

Transmitters can be programmed to work the following way:

- | | |
|--------------------------------------|--------------------------------|
| 1. Mode 1 - Dynamic mode (1 button) | Open/Stop/Close/Stop/Open..... |
| 2. Mode 2 - (2 Buttons) | Open / Close |
| 3. Mode 3 - Courtesy Light | Light ON & OFF |



PROGRAMMING TRANSMITTERS

Programming:

Mode 1: Dynamic (open / stop / close / open...)

1. Press & hold S button for 2 seconds, LED1 illuminates
2. Press TWICE the top or top left button on the transmitter, LED1 turns off

Mode 2: Open on 1 Button, Close on another button.

1. Press & hold S button for 2 seconds, LED1 illuminates
2. Press S button ONCE, LED 1 goes out, LED 2 ON
3. Press channel button TWICE, LED2 turns off
4. Press & hold S button for 2 seconds, LED1 illuminates,
5. Press S button TWICE, LED 1 turns off, LED 3 on.
6. Press next channel on transmitter TWICE, LED1 turns off.

Mode 3: Lights On and Off using a spare channel:

1. Press & hold S button for 2 seconds, LED1 ON, then press 3 more times the S button, LED1, 2 & 3 illuminate
2. Press the spare channel on the transmitter TWICE.

To exit programming mode, press & hold S button for 2 seconds, LED 1 illuminates, then press S button 4 times. Alternatively, leave for 10 seconds.

DELETING TRANSMITTERS

Deleting:

Single transmitters or ALL transmitters can be deleted before being re-programmed.

How to delete ALL programmed transmitters

1. Press & hold 'S' button for 8 seconds, LED's 1, 2 & 3 all turn ON

How to delete a SINGLE programmed transmitter

1. Press & hold S and P buttons LED's 3 will turn ON
2. Press any button on the programmed transmitter, LED 3 will turn OFF.
3. Release S and P buttons, the transmitter should be deleted.

NOTES

DECLARATION OF CONFORMITY

EC DECLARATION OF CONFORMITY

Product Group Garage Door Operator
Model No Black Edition
Serial No XXXXXXXX00001 - xxxxxxxx 999999

The listed garage door operator corresponds to the applicable sections of the standards EN 300 220-2 V2.4.1 (2012-05), EN 300 220-1 V2.4.1 (2012-05), EN 301 489-3 V1.0.1 (2013-08), EN 301 489-1 V1.0.2 (2011-09), EN 62479:2010, EN 55014-1:2008 + A1:2009 + A2:2011, EN 55014-2:2009 + A1:2011 + A2:2008, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 60335-2-05:2015, EN 60335-1:2012 (4th Edition) + A11:2014

Test Report No NCT150503451E01 & NCT150503451E02
NCT150503451E03 & NCT150503451E04
NCT150503451S1

In accordance with the requirements of the above standards and hence that has been properly demonstrated that the requirements of the Directive have been fulfilled. The product is in conformity with the essential requirements of Article 3.1(a) and the protection of the health and 3.1(b), 3.2 of Directive 1989/5/EC and the essential requirements of Directive 2004/108/EC

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Garage Door Automation Solutions

Single Piece Garage Doors
Sectional Garage Doors



Roller Garage Doors



Radio Controls



Smart Phone and GSM Control

