

# V-SERIES SMART INSTALLATION MANUAL



**VANTAGE  
SMART**



# Company Profile



1986

1990

1995

1999

Today

**In-house  
R&D  
development  
team**

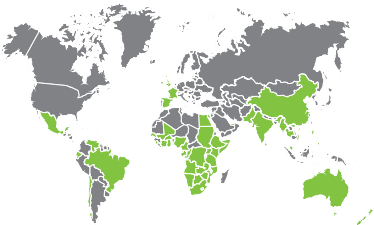
**Manufactures to  
international  
quality standard  
ISO 9001:2015**



**100%  
testing of  
products**

**After-sales  
multi-language  
Technical Support**

**Sales and technical support to Africa, Europe, Asia,  
the Americas, Australia and the Pacific**



**Technical Support  
Operating Times**

**Monday to Friday**  
08h00 to 16h30 GMT+2,

**Saturdays**  
08h00 to 14h00 GMT+2

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Images in this Installation Manual may vary depending on the **SMART Operator** chosen for installation.

**Icons used in this manual**

This icon indicates tips and other information that could be useful during the installation.



This icon denotes variations and other aspects that should be considered during installation.



**This icon indicates warning, caution or attention! Please take special note of critical aspects that MUST be adhered to in order to prevent injury.**



This icon indicates a clickable hyperlink.

# 1. Introduction

## FAST TRACK HYPERLINKS

### 1.1. Important Safety Information

### 1.2. Safe Disposal of Batteries

### 1.3. Lightning Protection

The **VANTAGE SMART** linear swing gate motor, available in three models with actuation strokes of 300mm, 400mm and 500mm, respectively, has been designed to automate a wide variety of swing gates, from single or double light-domestic gates to heavy industrial double swing gates.

The fail-safe and fully-redundant Position and Collision Detection System has been designed and tested to set the standard in safety of operation and to provide an unparalleled level of reliability and durability in operation.

The gate Travel Limits are managed by a sealed opto-electronic system that has been designed not only to ensure ultra-reliable operation, but also to ensure precise position and trajectory control. This enables very accurate and reliable collision detection to ensure safe operation even under trying conditions.

This guide covers the mechanical installation of your new **VANTAGE SMART** swing gate operator.



**VANTAGE SMART swing gate operators can be installed on both inward- and outward-opening swing gates. Please see the relevant sections for each type of installation, paying attention to any site preparation that needs to be made before the operators are installed.**

#### Advanced features of the Vx SMART logic controller include:

- Interactive graphic user interface via a smartphone application
- Automated setup of gate endpoints (limits)
- Independently-adjustable motor speed in both opening and closing directions
- Fail-safe collision detection and auto-reverse (adjustable sensitivity)
- Smooth, adjustable start/stop (ramp-up/ramp-down)
- Multiple operational modes
- Selectable, adjustable Autoclose
- Pedestrian (partial) opening
- Positive Close Mode
- Supports up to three sets of Photon SMART Safety beams
- Independent safety inputs for opening and closing beams (wired)
- Automatic beam test for both opening and closing beams (wired)
- Advanced lightning/surge protection
- Onboard NOVA code-hopping radio receiver with full channel-mapping capability (1500 MyCentsys Remote users<sup>1</sup>)

1. Multiple buttons per remote can be used.

### 1.1. Important Safety Information



#### ATTENTION!

To ensure the safety of people and possessions, it is important that you read all of the following instructions.

Incorrect installation or incorrect use of the product could cause serious harm to people.

The installer, being either professional or DIY, is the last person on the site who can ensure that the operator is safely installed and that the whole system can be operated safely.

## Warnings for the Installer

**CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS before installing the product.**

- All installation, repair, and service work to this product must be carried out by a suitably qualified person
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety
- Do not activate your gate unless it is in view and you can determine that its area of travel is clear of people, pets, or other obstructions
- **NO ONE MAY CROSS THE PATH OF A MOVING GATE —** always keep people and objects away from the gate and its area of travel
- **NEVER LET CHILDREN OPERATE OR PLAY WITH THE GATE CONTROLS**
- Secure all easily-accessed gate opener controls in order to prevent unauthorised use of the gate
- Do not in any way modify the components of the automated system
- Do not install the equipment in an explosive atmosphere: the presence of flammable gases or fumes is a serious danger to safety
- Before attempting any work on the system, turn off electrical power to the operator and disconnect the batteries
- The Mains power supply of the automated system must be fitted with an all-pole switch with contact opening distance of 3mm or greater; use of a 5A hydraulic breaker with all-pole circuit break is recommended
- Make sure that an earth leakage circuit breaker with a threshold of 30mA is fitted upstream of the system
- Never short-circuit the Battery and do not attempt to recharge the batteries with power supply units other than that supplied with the product, or manufactured by Centurion Systems (Pty) Ltd
- Make sure that the earthing system is correctly constructed and that all metal parts of the system are suitably earthed
- Safety devices must be fitted to the installation to guard against mechanical movement risks such as crushing, dragging and shearing
- Always fit the warning signs visibly to the inside and outside of the gate
- The installer must explain and demonstrate the manual operation of the gate in case of an emergency and must hand over the User Guide/Warnings to the user
- The installer must explain these safety instructions to all persons authorised to use this gate, and be sure that they understand the hazards associated with automated gates
- Do not leave packing materials (plastic, polystyrene, etc.) within reach of children as such materials are potential sources of danger
- Dispose of all waste products like packing materials, worn-out batteries, etc., according to local regulations
- Always check the obstruction detection system, and safety devices for correct operation
- Neither Centurion Systems (Pty) Ltd, nor its subsidiaries, accepts any liability caused by improper use of the product, or for use other than that for which the automated system was intended
- This product was designed and built strictly for the use indicated in this documentation; any other use, not expressly indicated here, could compromise the service life/operation of the product and/or be a source of danger
- Everything not expressly specified in these instructions is not permitted



**Never run the operator directly from the battery!**

**Doing so will cause damage to the operator.**

**Only run the operator from the Vx SMART Controller.**

## 1.2. Safe Disposal of Batteries



### ATTENTION!

- Do not incinerate
- Do not short the Battery terminals
- Do not charge in a gas tight container
- Do not open
- Recharge after use
- Flush with water at once if contact is made with electrolyte (acid)



## 1.3. Lightning Protection

The electronic controller utilises the same proven surge protection philosophy that is used in all our products. While this does not guarantee that the unit will not be damaged in the event of a lightning strike or power surge, it greatly reduces the likelihood of such damage occurring. The earth return for the surge protection is provided via the mains power supply earth and/or earth spike located next to the operator.



**In order to ensure that the surge protection is effective, it is essential that the unit is properly earthed.**

**WARNING! WARNING! WARNING! WARNING! WARNING!**

## SAFETY FIRST

**KEEP CLEAR!  
GATE MAY MOVE AT ANY TIME!**



**MOVING GATE CAN CAUSE SERIOUS INJURY OR DEATH!**  
 KEEP CLEAR! GATE MAY MOVE AT ANY TIME!  
 DO NOT ALLOW CHILDREN TO OPERATE THE GATE OR PLAY IN THE  
 NEAR VICINITY OF THE GATE.

## 2. Product Specifications

### FAST TRACK HYPERLINKS

- 2.1. Physical Dimensions
- 2.2. Technical Specifications 
- 2.3. Allowable Gate Masses 
- 2.4. Wind Loads 

#### 2.1. Physical Dimensions

##### 2.1.1. VANTAGE 300 SMART

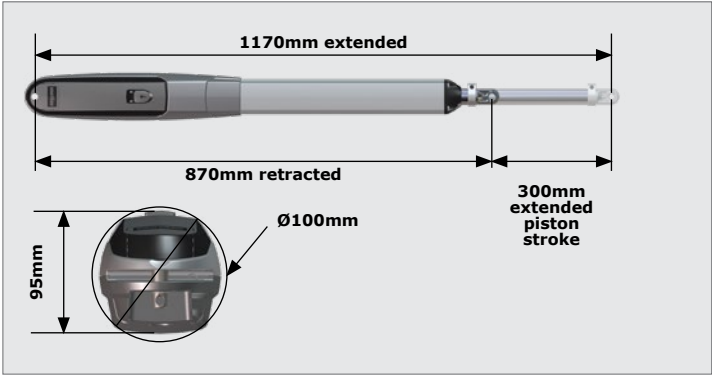


FIGURE 1. VANTAGE 300 SMART OVERALL DIMENSIONS

##### 2.1.2. VANTAGE 400 SMART

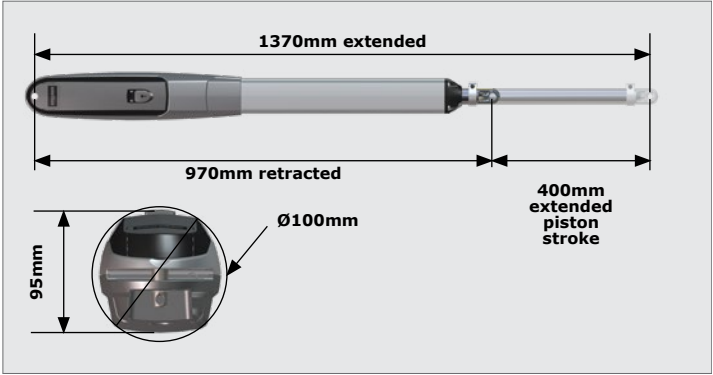


FIGURE 2. VANTAGE 400 SMART OVERALL DIMENSIONS



2.1.3. VANTAGE 500 SMART

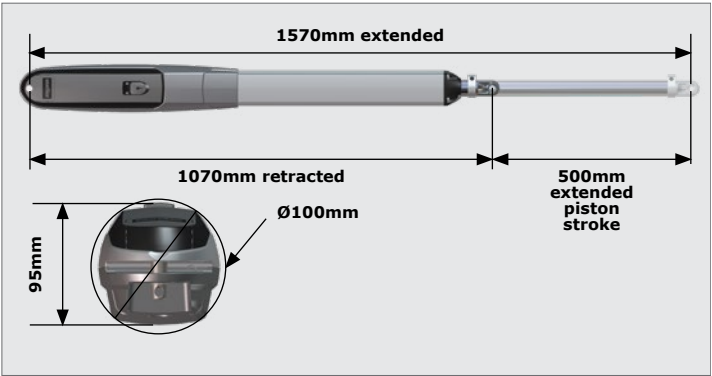


FIGURE 3. VANTAGE 500 SMART OVERALL DIMENSIONS

2.2. Technical Specifications

2.2.1. Main Operator

|                                                       | VANTAGE<br>300 SMART                       | VANTAGE<br>400 SMART | VANTAGE<br>500 SMART |
|-------------------------------------------------------|--------------------------------------------|----------------------|----------------------|
| Input voltage                                         | 90V - 240V AC ± 10%, 50/60Hz               |                      |                      |
| Motor voltage                                         | 12V DC                                     |                      |                      |
| Motor power supply                                    | Battery-driven (standard capacity - 7.2Ah) |                      |                      |
| Battery charger <sup>2</sup>                          | 1.8A @ 13.8V                               |                      |                      |
| Current consumption (Mains)                           | 170mA                                      |                      |                      |
| Current consumption<br>(Motor rated at load)          | 15A - maximum                              |                      |                      |
| Operator push force - maximum                         | 250kgf                                     |                      |                      |
| Operator stroke                                       | 300mm                                      | 400mm                | 500mm                |
| Piston extention / retraction speed                   | 28mm/sec (variable)                        |                      |                      |
| Typical gate opening time <sup>3</sup>                | 11.3 sec                                   | 14.3 sec             | 17.8 sec             |
| Manual override                                       | Key release <sup>4</sup>                   |                      |                      |
| Maximum number of operations<br>per day               | 250                                        |                      |                      |
| Duty cycle - Mains present <sup>5,6</sup>             | 50%                                        |                      |                      |
| Operations in standby with 7.2Ah battery <sup>7</sup> |                                            |                      |                      |
| Half day                                              | 70                                         |                      |                      |
| Full day                                              | 58                                         |                      |                      |
| Collision sensing                                     | Electronic                                 |                      |                      |
| Operating temperature range                           | -15°C to +50°C                             |                      |                      |
| Mass of unit packed (excluding battery)               |                                            |                      |                      |
| Single kit <sup>8</sup>                               | 8kg                                        | 8.5kg                | 9kg                  |
| Double kit <sup>9</sup>                               | 13kg                                       | 14kg                 | 15kg                 |

TABLE 1

1. Can increase battery capacity for longer standby times.  
2. Can operate off a solar supply, consult your reseller for assistance.  
3. Assumes a full stroke of operator is used on a level gate with no wind.  
4. Each operator comes with a unique set of keys.  
5. Based on 25°C ambient temperature and unit not in direct sunlight.  
6. Based on an operator push force of less than 50% of rated.  
7. Based on double kit excluding Infrared Safety Beams.  
8. Single kit contains one operator and Wall Box.  
9. Double kit contains two operators and one Wall Box.

## SECTION 2

## PRODUCT SPECIFICATIONS

## 2.2.2. SMART Controller

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Maximum motor current per channel | 15A (fused)                          |
| Maximum input voltage             | 14.4V DC                             |
| Standby current draw              | 51mA <sup>2</sup>                    |
| Maximum solenoid current draw     | 3A DC / AC (10 Seconds) <sup>1</sup> |
| Maximum auxillary output current  | 3A (Resettable Electronic Fuse)      |
| Collision detection               | Current sense and optical            |
| Position and trajectory control   | Optical                              |
| Temperature range                 | -20°C to +60°C                       |
| Onboard receiver type             | Code-hopping multichannel            |
| Receiver code storage capacity    | 1500 transmitters                    |
| Receiver frequency                | 433MHZ                               |

TABLE 2

1. Limited by charger, ensure that load does not prevent battery from fully charging.  
Continuous current draw should ideally be less than 500mA but must not exceed 1A.

2. Operators connected, no ancillaries fitted.

## 2.2.3. Power Supply

|                                                                    |                                                           |
|--------------------------------------------------------------------|-----------------------------------------------------------|
| Nominal input voltage                                              | 90V - 240V AC $\pm 10\%$ @ 50/60Hz                        |
| AC current draw (maximum)                                          | 170mA                                                     |
| Temperature range                                                  | -20°C to +60°C                                            |
| Battery charger output current<br>(dependant on PSU input voltage) | 90V AC input: 1.2A @ 13.8V<br>240V AC input: 1.8A @ 13.8V |

TABLE 3

## 2.3. Allowable Gate Masses



Ensure that the gate leaf meets Wind Load Specifications.

Maximum allowable gate mass for the **VANTAGE 300 SMART** operator

| Gate Swing Angle | Up to 1.5m | Up to 2m | Up to 2.5m | Up to 3m <sup>1</sup> |
|------------------|------------|----------|------------|-----------------------|
| 90°              | 350kg      | 350kg    | 335kg      | 230kg                 |
| 100°             | 350kg      | 350kg    | 335kg      | 230kg                 |

TABLE 4

1. An electric lock must be fitted to secure gate in closed position.

Maximum allowable gate mass for the **VANTAGE 400 SMART** operator

| Gate Swing Angle | Up to 1.5m | Up to 2m | Up to 2.5m | Up to 3m <sup>1</sup> | Up to 3.5m <sup>1</sup> | Up to 4m <sup>1</sup> |
|------------------|------------|----------|------------|-----------------------|-------------------------|-----------------------|
| 90°              | 500kg      | 500kg    | 500kg      | 360kg                 | 260kg                   | 200kg                 |
| 100°             | 500kg      | 500kg    | 388kg      | 280kg                 | 190kg                   | 150kg                 |
| 110°             | 500kg      | 306kg    | 198kg      | 130kg                 |                         |                       |
| 120°             | 180kg      | 100kg    | 65kg       | Not recommended       |                         |                       |

TABLE 5

1. An electric lock must be fitted to secure gate in closed position.

Maximum allowable gate mass for the **VANTAGE 500 SMART** operator

| Gate Swing Angle | Up to 1.5m | Up to 2m | Up to 2.5m | Up to 3m <sup>1</sup> | Up to 3.5m <sup>1</sup> | Up to 4m <sup>1</sup> |
|------------------|------------|----------|------------|-----------------------|-------------------------|-----------------------|
| 90°              | 750kg      | 750kg    | 750kg      | 550kg                 | 410kg                   | 310kg                 |
| 100°             | 750kg      | 750kg    | 600kg      | 420kg                 | 310kg                   | 230kg                 |
| 110°             | 750kg      | 500kg    | 320kg      | 220kg                 |                         |                       |
| 120°             | 310kg      | 170kg    | 110kg      | Not recommended       |                         |                       |

TABLE 6

1. An electric lock must be fitted to secure gate in closed position.

2.4. Wind Loads

Wind speeds for which operator will still operate the gate.  
(**VANTAGE 300 SMART**, **VANTAGE 400 SMART** or **VANTAGE 500 SMART** operators)  
For a 25% covered gate: (Palisades, etc.) x 1.8 metre high

| VANTAGE 300 SMART MAXIMUM OPENING SPEED            |      |      |      |      |      |     |
|----------------------------------------------------|------|------|------|------|------|-----|
| Gate length                                        | 1.5m | 2m   | 2.5m | 3m   | 3.5m | 4m  |
| Gate height                                        | 1.8m | 1.8m | 1.8m | 1.8m | N/A  | N/A |
| Allowable wind speed 25% clad(km/h) <sup>1</sup>   | 105  | 78   | 62   | 52   | N/A  | N/A |
| Allowable wind speed 100% clad (km/h) <sup>1</sup> | 52   | 39   | 31   | 26   | N/A  | N/A |

TABLE 7

1. No wind opening time is approximately 12 seconds.  
Gate opening and closing times will increase as wind speed increase.

| VANTAGE 400 SMART MAXIMUM OPENING SPEED            |      |      |      |      |      |      |
|----------------------------------------------------|------|------|------|------|------|------|
| Gate length                                        | 1.5m | 2m   | 2.5m | 3m   | 3.5m | 4m   |
| Gate height                                        | 1.8m | 1.8m | 1.8m | 1.8m | 1.8m | 1.8m |
| Allowable wind speed 25% clad(km/h) <sup>1</sup>   | 122  | 91   | 72   | 60   | 52   | 46   |
| Allowable wind speed 100% clad (km/h) <sup>1</sup> | 61   | 45   | 36   | 30   | 26   | 23   |

TABLE 8

1. No wind opening time is approximately 15 seconds.  
Gate opening and closing times will increase as wind speed increase.

| VANTAGE 500 SMART MAXIMUM OPENING SPEED            |      |      |      |      |      |      |
|----------------------------------------------------|------|------|------|------|------|------|
| Gate length                                        | 1.5m | 2m   | 2.5m | 3m   | 3.5m | 4m   |
| Gate height                                        | 1.8m | 1.8m | 1.8m | 1.8m | 1.8m | 1.8m |
| Allowable wind speed 25% clad(km/h) <sup>1</sup>   | 134  | 100  | 79   | 67   | 58   | 51   |
| Allowable wind speed 100% clad (km/h) <sup>1</sup> | 67   | 50   | 39   | 33   | 29   | 25   |

TABLE 9

1. No wind opening time is approximately 18 seconds.  
Gate opening and closing times will increase as wind speed increase.

### 3. Product Identification

#### 3.1. Main Kit



FIGURE 4. PRODUCT IDENTIFICATION - MAIN KIT

- |                                       |                                      |
|---------------------------------------|--------------------------------------|
| 1. Gate Bracket Pin                   | 6. Gate Bracket                      |
| 2. 14mm Snap Ring                     | 7. M5 Barrel Nut                     |
| 3. <b>VANTAGE SMART</b> Gate Operator | 8. Origin Clamp                      |
| 4. Wall Bracket                       | 9. Stainless steel cap screw M5 x 25 |
| 5. Wall Bracket Mounting Plate        | 10. Gate Operator Keys <sup>1</sup>  |

1. Keys are specific to each operator - key number must be recorded.

#### 3.2. Vx SMART Wall Box

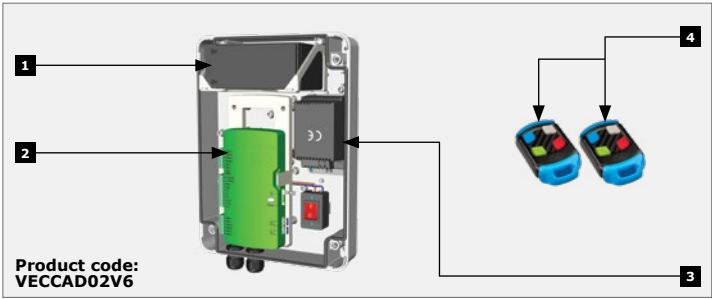


FIGURE 5. V-SERIES WALL BOX INCLUDING CHARGER AND CONTROLLER

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| 1. 12V 7.2Ah Battery <sup>1</sup>    | 3. Charger                      |
| 2. <b>Vx SMART Series</b> Controller | 4. Code-hopping remote controls |

1. Batteries can be of a larger capacity for longer power failure autonomy and are not included in the kit;  
Consult your local authorised dealer for assistance.

4. Required Tools and Equipment



FIGURE 6. REQUIRED TOOLS AND EQUIPMENT

## 5. New Site Installation Preparation

### FAST TRACK HYPERLINKS

- 5.1. **General Considerations for the Installation**
- 5.2. **Determine Gate Opening Angle** 
- 5.3. **Key Terms in this Section** 
- 5.4. **Side Wall Limitation - Inward-Opening** 
- 5.5. **Pillar Hinge Depth Limitation - 90° Inward-Opening** 
- 5.6. **Mounting the Wall Bracket** 
- 5.7. **Mounting the Gate Bracket** 
- 5.8. **Cabling Requirements** 
- 5.9. **Critical Installation Checklist** 

### 5.1. General Considerations for the Installation

Always recommend the fitment of additional safety equipment such as safety edges and Safety Beams, for additional protection against entrapment or other mechanical risks.

Check that no pipes or electrical cables are in the way of the intended installation.

Check that enough space is available for the gate operator with the gate in the required open position (see **Figure 7**). 

If the swing gate leaf is longer than 3 metres, ensure that an electric lock can be fitted.

For security reasons, never fit an operator on the outside of the gate, where the public has access to it (refer to the instructions for an **Outward-Opening Swing Gate**). 



**Never run an operator directly off the 12V battery.**

#### Install the gate operator only if:

- It will not pose a hazard to the public
- There is sufficient clearance to a roadway and/or public thoroughfares
- The installation will meet all municipal and/or local authority requirements once completed
- The gate mass, leaf width, wind loading and application is within the operator specifications
- The gate is in good working order, meaning:
  - that it swings freely;
  - does not move on its own if left in any position;
  - each gate leaf is strong and rigid;
- Once installed, there is sufficient clearance between moving parts during operation of the gate to reduce the risk of personal injury and/or entrapment
- It is recommended that Pushbuttons and Keyswitches, if fitted, be positioned in such a way that the gate is in line of sight of the user

5.2. Determine Gate Opening Angle

Use this procedure to accurately determine the gate opening angle:

5.2.1. Step 1

Close the gate and measure a distance of one metre from the centreline of the gate hinge.

Make a mark on the ground.

5.2.2. Step 2

Open the gate and measure along the gate a distance of one metre from the centreline of the gate hinge.

Make a mark on the ground.

Measure the distance on the ground between the two marks (Z).

Using this Z-Value, read off the gate opening angle from the Table below.

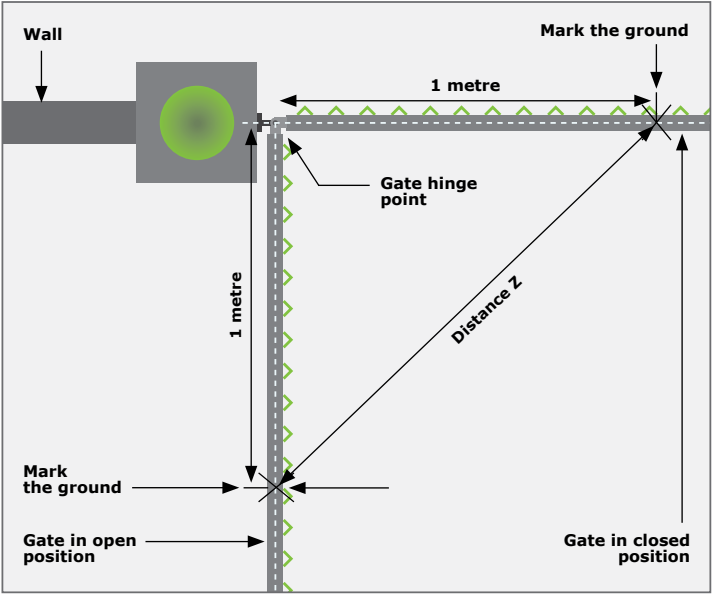


FIGURE 7

5.2.3. Step 3

Gate opening angle based on Z-Value

| From   | To     | Use gate swing angle of |
|--------|--------|-------------------------|
| 1414mm | 1521mm | 90°-99°                 |
| 1532mm | 1638mm | 100°-110°               |

TABLE 10

5.3. Key Terms Used in this Section

5.3.1. Pillar maximum

The maximum allowable distance measured from the centre of the gate hinge to the edge of the pillar.

5.3.2. Wall minimum

This value denotes the minimum amount of space needed to install the operator and is measured from the side wall to the gate when the gate is in the open position.

5.4. Side Wall Limitation - Inward-Opening

Figure 8 shows the side wall limitations for an **Inward-opening gate** for the **VANTAGE 300 SMART**, **VANTAGE 400 SMART** and **VANTAGE 500 SMART** operators. For installations where the distance from the hinge point to the side wall is close to 200mm, the 'A' value chosen in **Section 6.2**, must be 145mm or less. In this scenario, the close proximity of the hinge point to the side wall, means that there are very few suitable geometry options. 

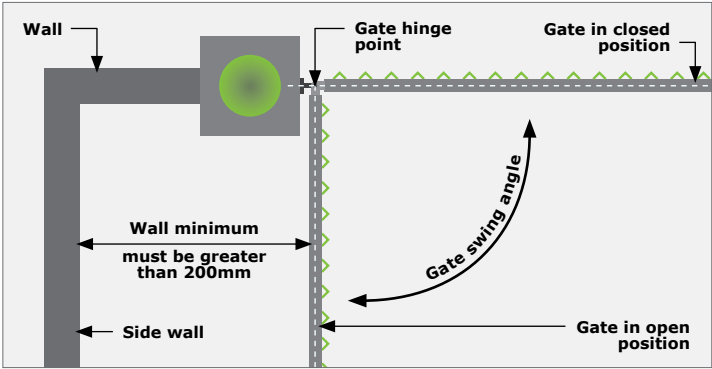


FIGURE 8. SIDE WALL LIMITATION FOR INWARD-OPENING GATE

5.5. Pillar Hinge Depth Limitation - 90° Inward-Opening

Figure 9 shows the pillar hinge depth limitation for a **90° Inward-opening gate**. An operator must be installed in accordance with these limitations to ensure that it does not interfere with the operation of the gate during movement. The hinge depth of the gate on the pillar, needs to be checked against the pillar maximum values in Table 9 to determine if the installation is possible. If the hinge depth of the gate is excessive, the gate may have to be relocated on the pillar to achieve the required pillar maximum values. This does not apply to gates opening more than 90° as the gate would need to swing beyond 90° without colliding with the pillar.

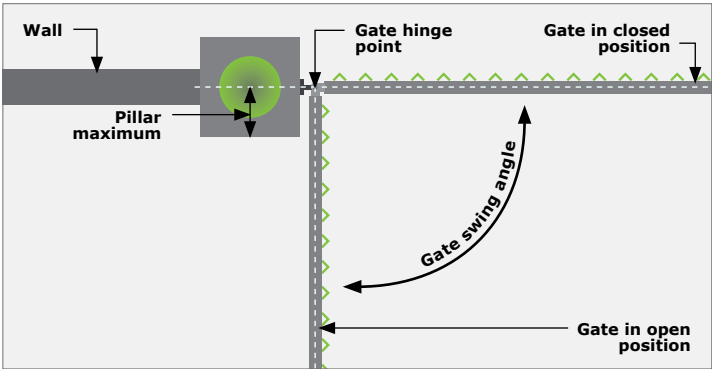


FIGURE 9. PILLAR HINGE DEPTH LIMITATION FOR 90° INWARD-OPENING GATE



| Operator          | Pillar Maximum | Swing Gate Angle |
|-------------------|----------------|------------------|
| VANTAGE 300 SMART | 90mm           | 90°              |
| VANTAGE 300 SMART | 75mm           | 100°             |
| VANTAGE 400 SMART | 165mm          | 90°              |
| VANTAGE 500 SMART | 245mm          | 90°              |

TABLE 11

5.6. Mounting the Wall Bracket

The following recommended methods may be used to install the operator.

5.6.1. Through-wall

Applications:

- Pre-fabricated walling
- For heavy gates operating frequently

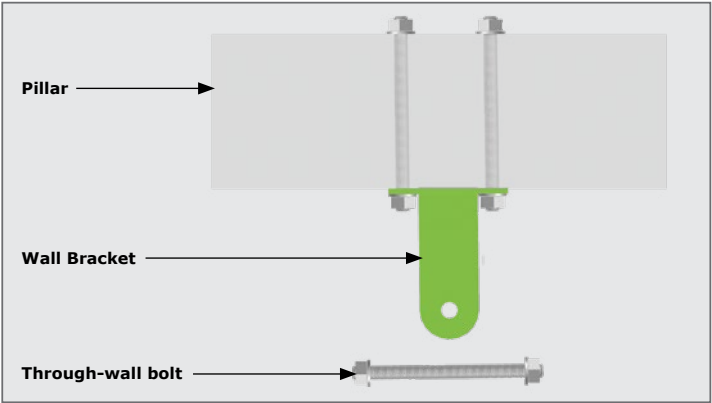


FIGURE 10

5.6.2. Chemical anchors

Applications:

- Masonry pillars
- Frequent use

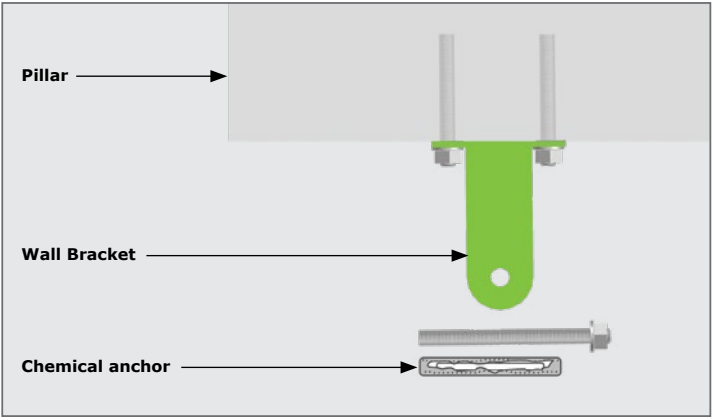


FIGURE 11

## SECTION 5

## NEW SITE INSTALLATION PREPARATION

### 5.6.3. Welding

Applications:

- Steel pillars

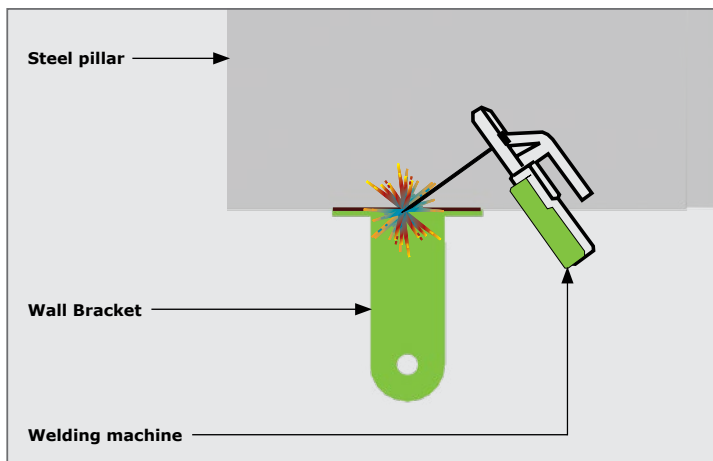


FIGURE 12

### 5.6.4. Sleeve anchors

Applications:

- Lighter gates
- Domestic

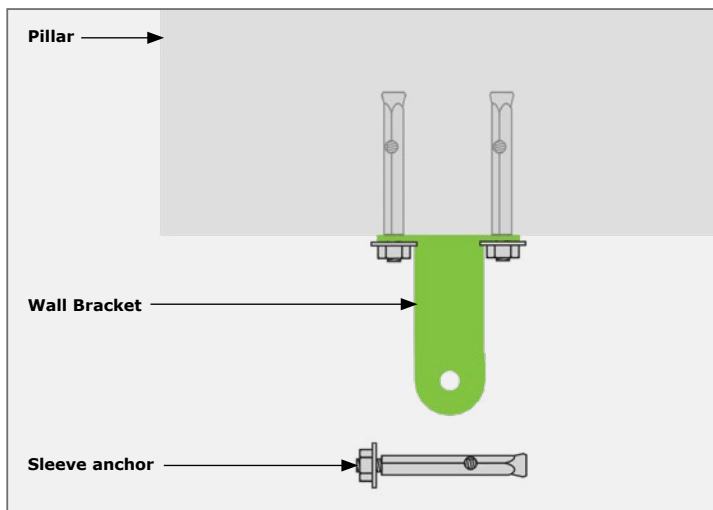


FIGURE 13

## SECTION 5

## NEW SITE INSTALLATION PREPARATION

### 5.6.5. Rawl bolts

Applications:

- Lighter gates
- Domestic

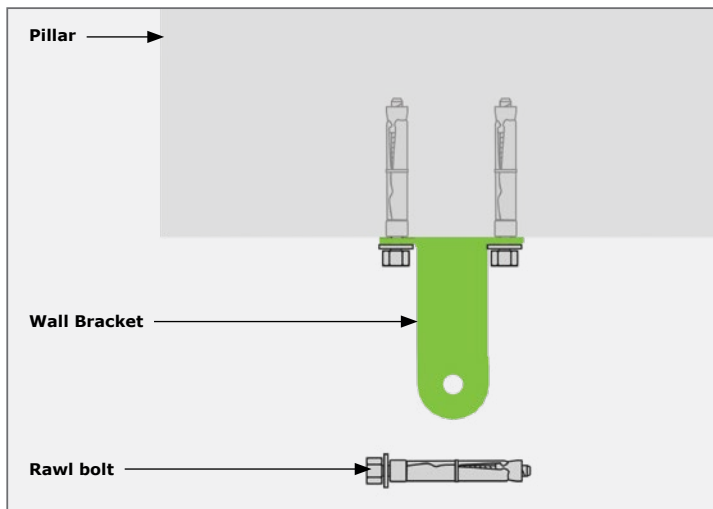


FIGURE 14

## 5.7. Mounting the Gate Bracket

### 5.7.1. Welding

Applications:

- Domestic
- Medium gates
- Frequent use

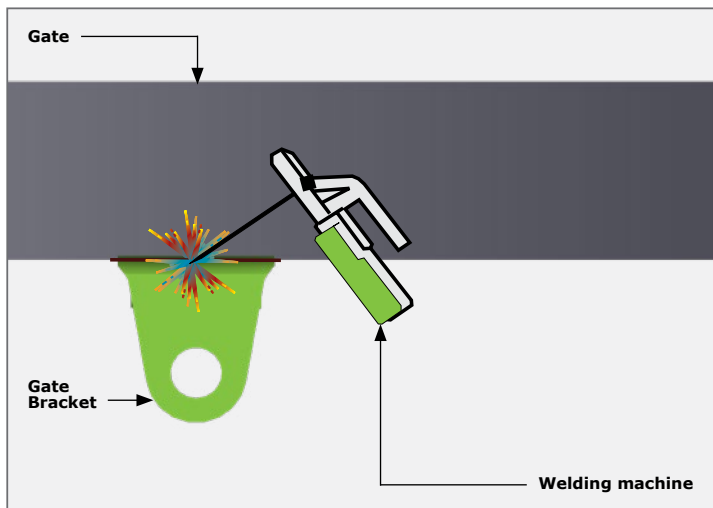


FIGURE 15

## SECTION 5

## NEW SITE INSTALLATION PREPARATION

## 5.7.2. Through-bolts

(high-tensile)

Applications:

- Domestic
- Light gates
- Infrequent use



TEK screws and mild steel bolts are not recommended.

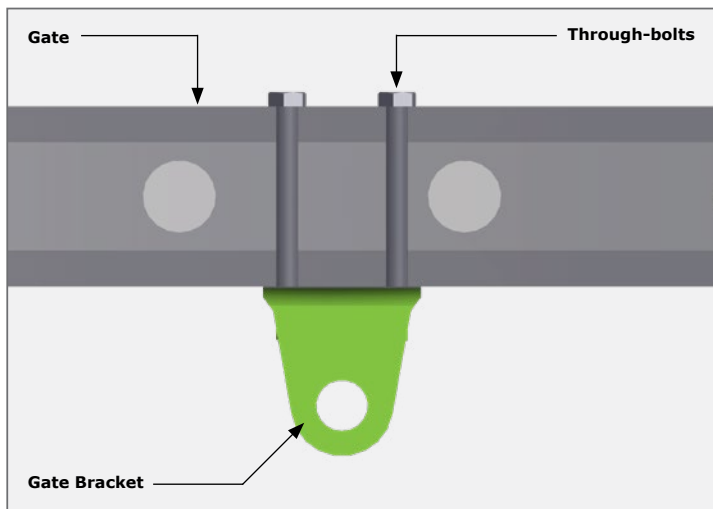


FIGURE 16

## 5.8 Cabling Requirements

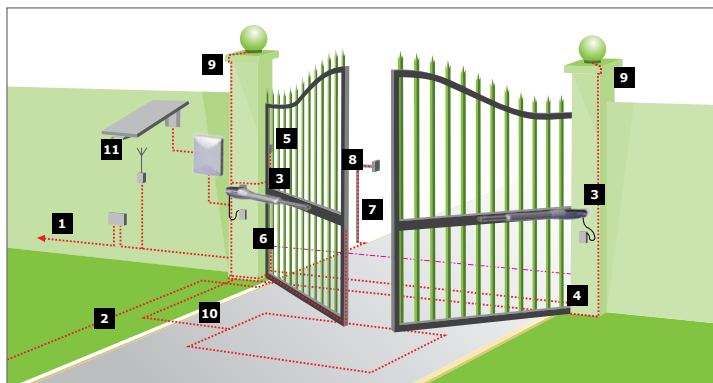


FIGURE 17. CABLING REQUIREMENTS

### Legend

1. 90V - 240V AC Mains cable via Mains isolator<sup>1</sup> switch (3 core LNE 0,5mm<sup>2</sup>)<sup>2</sup>, or low-voltage 16V AC battery charger supply<sup>3</sup> (2 core 1,5mm<sup>2</sup>).
2. Intercom cable (n1 + 6 core) to house.
3. Master Motor (MTR M) or Slave Motor (MTR S) cable. (Minimum, 2 core 1.5mm<sup>2</sup> + 4 core 0,22mm<sup>2</sup> multi-stranded)<sup>4</sup>.
4. Optional radio receiver cable (3 core 0,5mm<sup>2</sup> multi-stranded, optional)<sup>5</sup>.
5. Optional Pedestrian Keyswitch (2 core 0,5mm<sup>2</sup> multi-stranded) or optional keypad (3 core 0,5mm<sup>2</sup> multi-stranded).
6. Optional, but recommended infrared Safety Beams (3 core 0,5mm<sup>2</sup> multi-stranded or 4 core 0.5mm<sup>2</sup> for CE compliance).
7. Optional intercom cable (n2+2 core 0,5mm<sup>2</sup> multi-stranded) to gate station.
8. Optional electric lock (2 core 0.5mm<sup>2</sup>).
9. Optional Pillar Light cable (3 core, size according to power regulations).
10. Optional ground loop for free-exit (1 core 0.5mm<sup>2</sup> multi-stranded - silicone-coated)<sup>6</sup>.
11. Optional solar panel (2 core 1.5mm<sup>2</sup> Cabtyre or G.P. in Conduit).

1. Mains isolator supplied with **Vx SMART** Wall Box.

2. Increase cable thickness if Pillar Lights are to be installed.

3. Screened cable is always recommended to provide better protection against lightning - earth one end of screening.

4. Please use **VANTAGE SMART** cabling. Order reference: CABLEVEC68 (10M maximum from Vx-Series controller to operator).

5. For optimum range an external receiver can be mounted on the wall.

6. Consult manufacturer of loop detector for specific details.



- All cables must be routed in conduit unless underground cable is being used
- Mains isolator must be less than one metre from the operator
- Safety Beams are always recommended: i5, Photon or Photon SMART

## 5.9. Critical Installation Checklist

The following is a list of critical requirements that must be adhered to in order to ensure reliable operation of your **VANTAGE SMART** operator(s):

- Ensure that the Wall Bracket is securely anchored
- Use the operator's maximum stroke
- Only use the **VANTAGE SMART** cable for the installation
- Leave a 350mm long loop in the operator cable as per Figure 41
- Fit an Electronic Gate Lock if the leaf width is greater than 3 metres
- Ensure that the opening and closing angles conform to the installation guidelines
- Ensure that your gate and operator(s) are equipped to deal with Wind Loading (refer to **Section 2.4. - "Wind Loads"**)

**BACK TO SECTION INDEX**

**BACK TO CONTENTS**

## 6. Operator Installation - Inward-Opening

### 6.1. New Site Installations

Figure 18 illustrates the values corresponding to the **Inward-Opening** Gate Installation Tables.

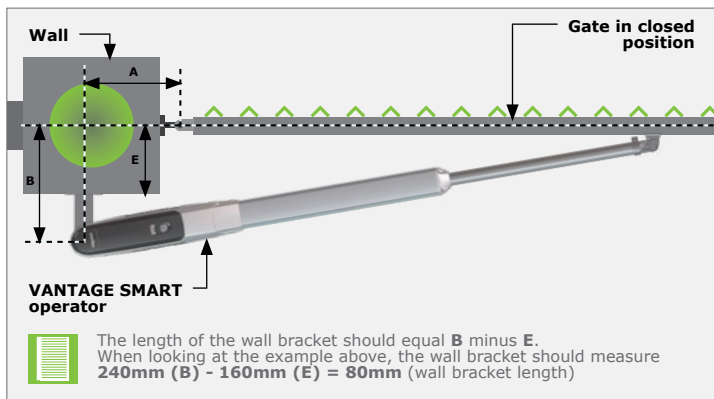


FIGURE 18. BRACKET POSITION - INWARD-OPENING GATE



Ensure that the gate mass does not exceed the specifications on **Section 2.3. "Allowable Gate Masses"**.

### 6.2. Key terms used in this section

#### 6.2.1. E-Value<sup>1</sup>

The distance from the centre of the gate hinge to the edge of the pillar<sup>1</sup>.

#### 6.2.2. A-Value<sup>2</sup>

The horizontal distance from the Wall Bracket/pivot pin to the center of the gate hinge<sup>1</sup>.

#### 6.2.3. B-Value<sup>2</sup>

The vertical distance from the Wall Bracket/pivot pin to the center of the gate hinge<sup>1</sup>.

1. Refer to Figure 18 above.

2. Seen from top of pillar.

#### Step 1

Measure the E-Value and ensure that it does not exceed the values shown in **Table 11**. Using **Table 13 - Table 14** for the **VANTAGE 300 SMART**, **Table 15 - Table 18** for the **VANTAGE 400 SMART**, or **Table 19 - Table 22** for the **VANTAGE 500 SMART**. along with the E-Value limitation, choose the relevant A & B values for the installation that are as close as possible to the optimum installation position as possible.

**Example: 90° Inward-Opening gate (VANTAGE 400 SMART):**

By looking at the E-Values in **Table 15**, there are two valid options for a 160mm E-Value, these are shown in **Table 12**.

| E-Value<br>Depth of gate hinge to pillar | A-Value | B-Value |
|------------------------------------------|---------|---------|
| <165mm                                   | 145mm   | 240mm   |
| <175mm                                   | 130mm   | 250mm   |

TABLE 12

VANTAGE 300 SMART Inward-Opening Gate Geometry Tables:  
90° Inward-Opening Gate

| E-Value<br>Depth of gate hinge to pillar | A-Value            | B-Value            |
|------------------------------------------|--------------------|--------------------|
| <60mm                                    | 165mm              | 130mm              |
| <70mm                                    | 155mm              | 140mm              |
| <80mm                                    | 145mm              | 150mm              |
| <90mm <sup>1</sup>                       | 130mm <sup>1</sup> | 160mm <sup>1</sup> |

TABLE 13

1. Optimum installation.

100° Inward-Opening Gate

| E-Value<br>Depth of gate hinge to pillar | A-Value            | B-Value            |
|------------------------------------------|--------------------|--------------------|
| <55mm                                    | 150mm              | 120mm              |
| <65mm                                    | 140mm              | 130mm              |
| <75mm <sup>1</sup>                       | 130mm <sup>1</sup> | 140mm <sup>1</sup> |

TABLE 14

1. Optimum installation.

VANTAGE 400 SMART Inward-Opening Gate Geometry Tables:  
90° Inward-Opening Gate

| E-Value<br>Depth of gate hinge to pillar | A-Value            | B-Value            |
|------------------------------------------|--------------------|--------------------|
| <120mm                                   | 195mm              | 200mm              |
| <130mm                                   | 180mm              | 210mm              |
| <140mm <sup>1</sup>                      | 170mm <sup>1</sup> | 220mm <sup>1</sup> |
| <150mm                                   | 160mm              | 230mm              |
| <165mm                                   | 145mm              | 240mm              |
| <175mm                                   | 130mm              | 250mm              |

TABLE 15

1. Optimum installation.

100° Inward-Opening Gate

| E-Value<br>Depth of gate hinge to pillar | A-Value            | B-Value            |
|------------------------------------------|--------------------|--------------------|
| <85mm                                    | 205mm              | 160mm              |
| <95mm                                    | 195mm              | 170mm              |
| <105mm <sup>1</sup>                      | 185mm <sup>1</sup> | 180mm <sup>1</sup> |
| <115mm                                   | 175mm              | 190mm              |
| <125mm                                   | 165mm              | 200mm              |

TABLE 16

1. Optimum installation.

110° Inward-Opening Gate

| E-Value<br>Depth of gate hinge to pillar | A-Value            | B-Value            |
|------------------------------------------|--------------------|--------------------|
| <50mm                                    | 211mm              | 120mm              |
| <60mm                                    | 203mm              | 130mm              |
| <70mm                                    | 195mm              | 140mm              |
| <75mm <sup>1</sup>                       | 191mm <sup>1</sup> | 145mm <sup>1</sup> |

TABLE 17

1. Optimum installation.

120° Inward-Opening Gate

| E-Value<br>Depth of gate hinge to pillar | A-Value            | B-Value            |
|------------------------------------------|--------------------|--------------------|
| <25mm                                    | 212mm              | 90mm               |
| <30mm <sup>1</sup>                       | 205mm <sup>1</sup> | 100mm <sup>1</sup> |

TABLE 18

1. Optimum installation.

VANTAGE 500 SMART Inward-Opening Gate Geometry Tables:  
90° Inward-Opening Gate

| E-Value<br>Depth of gate hinge to pillar | A-Value            | B-Value            |
|------------------------------------------|--------------------|--------------------|
| <140mm                                   | 275mm              | 230mm              |
| <150mm                                   | 260mm              | 240mm              |
| <160mm                                   | 250mm              | 250mm              |
| <170mm                                   | 235mm              | 260mm              |
| <180mm                                   | 220mm              | 270mm              |
| <190mm <sup>1</sup>                      | 205mm <sup>1</sup> | 280mm <sup>1</sup> |
| <200mm                                   | 195mm              | 290mm              |
| <215mm                                   | 180mm              | 300mm              |
| <225mm                                   | 170mm              | 310mm              |
| <235mm                                   | 155mm              | 320mm              |
| <245mm                                   | 140mm              | 330mm              |

TABLE 19

1. Optimum installation.

100° Inward-Opening Gate

| E-Value<br>Depth of gate hinge to pillar | A-Value            | B-Value            |
|------------------------------------------|--------------------|--------------------|
| <120mm                                   | 260mm              | 200mm              |
| <130mm                                   | 245mm              | 210mm              |
| <140mm                                   | 235mm              | 220mm              |
| <150mm <sup>1</sup>                      | 225mm <sup>1</sup> | 230mm <sup>1</sup> |
| <160mm                                   | 215mm              | 240mm              |
| <170mm                                   | 205mm              | 250mm              |
| <180mm                                   | 195mm              | 260mm              |

TABLE 20

1. Optimum installation.

110° Inward-Opening Gate

| E-Value<br>Depth of gate hinge to pillar | A-Value            | B-Value            |
|------------------------------------------|--------------------|--------------------|
| <85mm                                    | 260mm              | 160mm              |
| <90mm                                    | 250mm              | 170mm              |
| <100mm                                   | 240mm              | 180mm              |
| <110mm <sup>1</sup>                      | 235mm <sup>1</sup> | 190mm <sup>1</sup> |
| <120mm                                   | 225mm              | 200mm              |

TABLE 21

1. Optimum installation.



120° Inward-Opening Gate

| E-Value<br>Depth of gate hinge to pillar | A-Value            | B-Value            |
|------------------------------------------|--------------------|--------------------|
| <40mm                                    | 270mm              | 110mm              |
| <50mm                                    | 263mm              | 120mm              |
| <55mm                                    | 257mm              | 130mm              |
| <65mm                                    | 250mm              | 140mm              |
| <75mm <sup>1</sup>                       | 243mm <sup>1</sup> | 150mm <sup>1</sup> |

TABLE 22

1. Optimum installation.

Determine a suitable height for the Wall Bracket.



Ensure that this mounting height will allow the Gate Bracket to be securely mounted to the Gate Leaf.



Take care to make sure the operator is mounted level.

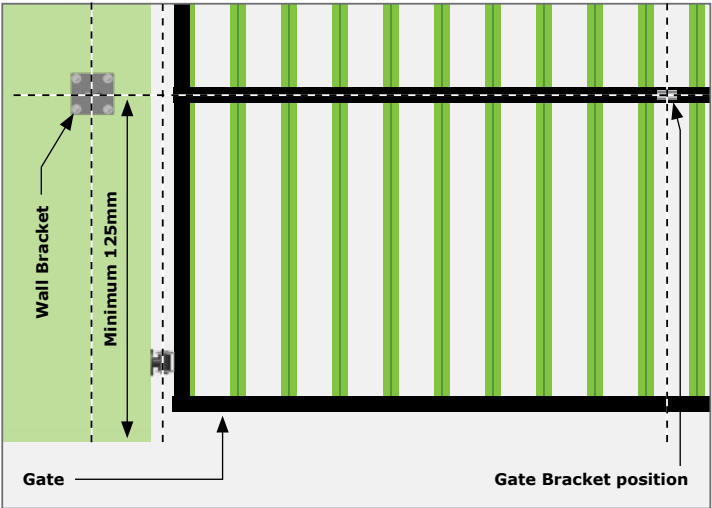


FIGURE 19. WALL BRACKET HEIGHT

## SECTION 6

## OPERATOR INSTALLATION - INWARD-OPENING

Mark the calculated length required on the Wall Bracket taking the B-Value, E-Value and Pillar shape into account as per Figure 19 above.

Cut off excess length.

Insert the Wall Bracket into the mounting plate.

Weld the brackets together.

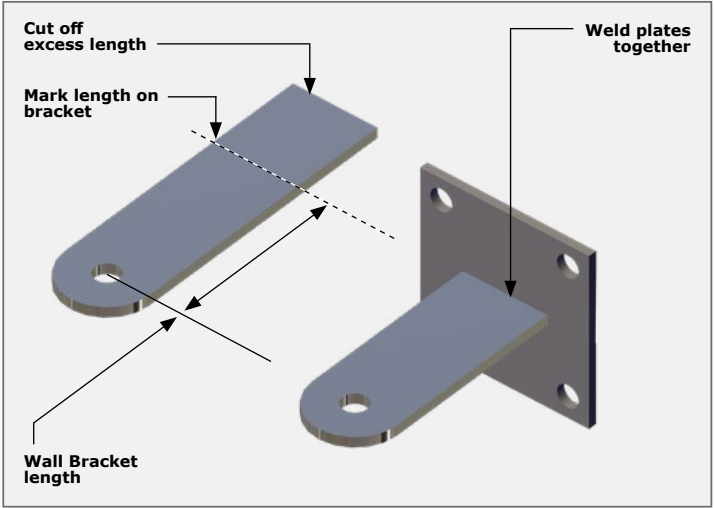


FIGURE 20. CUT AND WELD WALL BRACKET

Mount the Wall Bracket according to the A- and B-Values obtained on [Page 23 - Page 25](#). 



**It is critical that the Wall Bracket is securely mounted.**



See [Section 5 - "New Site Installation Preparation"](#). 

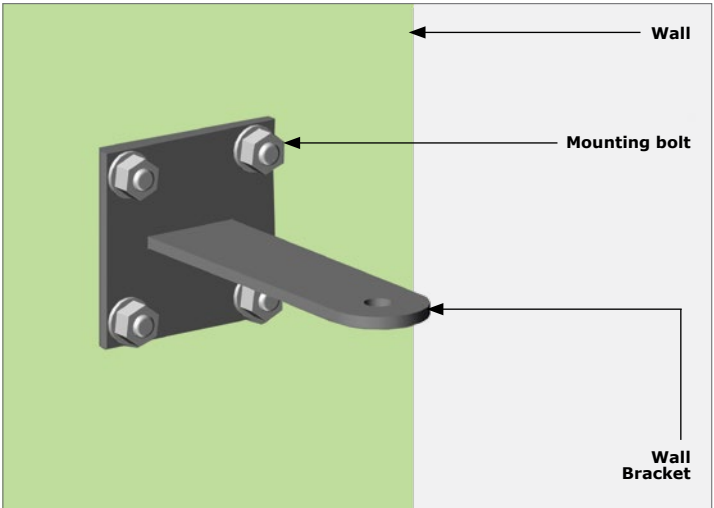


FIGURE 21

SECTION 6

OPERATOR INSTALLATION - INWARD-OPENING

Fit the Gate Bracket to the **VANTAGE SMART** and secure it with a snap ring.



As additional security to the snap ring, fit a padlock and the optional padlock shield.

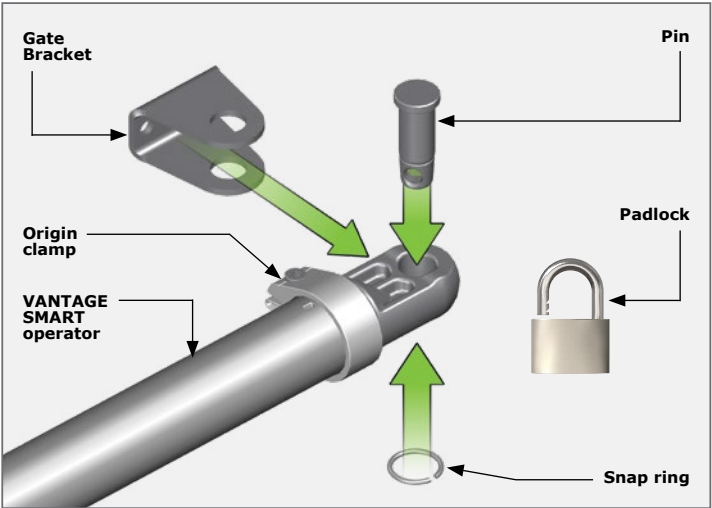


FIGURE 22

Fit the motor end of the operator to the Wall Bracket.



**Support the operator to prevent damage.**

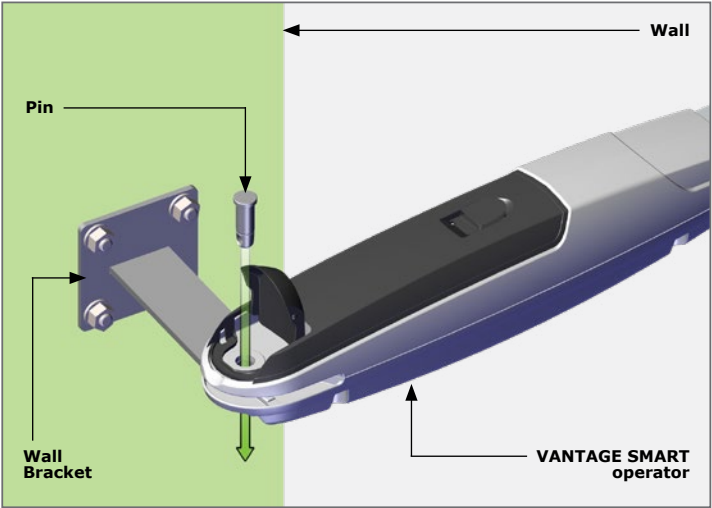


FIGURE 23

SECTION 6

OPERATOR INSTALLATION - INWARD-OPENING

Manually rotate the piston to the fully extended-position, and then retract it by half to one full turn.

With the gate in the closed position, use a G-clamp or spot weld the Gate Bracket in position to temporarily hold the Gate Bracket in place.

 The G-clamp should only be used to secure the Gate Bracket in place, and should never be used as a means of securing the operator piston arm as this could result in damage.

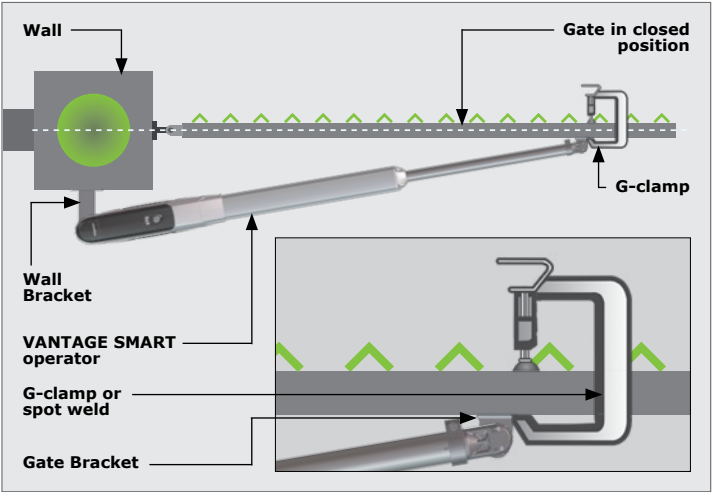


FIGURE 24

Manually release the operator using the key provided with the kit, and swing the gate to the desired open position.

Slide the origin clamp along the piston tube, right up to the end to the operator.

Secure origin clamp in place, and tighten properly with an Allen Key.

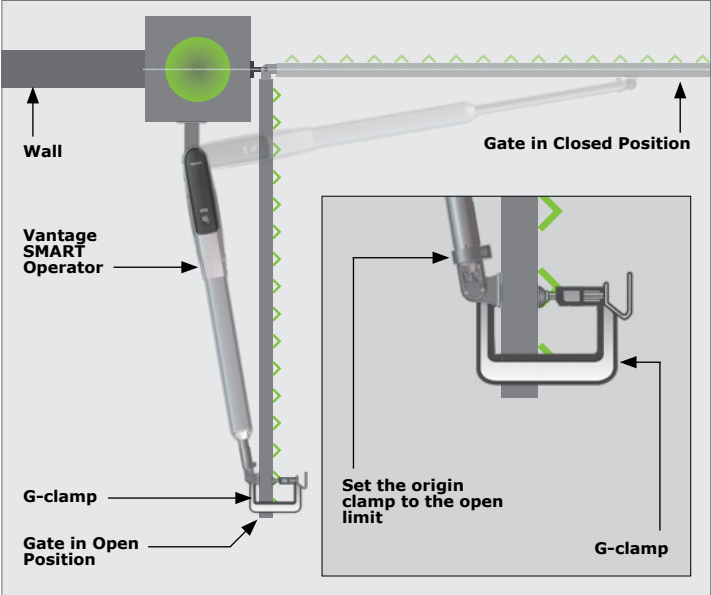


FIGURE 25

SECTION 6

OPERATOR INSTALLATION - INWARD-OPENING

If the gate opening angle is sufficient and the operator is utilising the majority of its stroke, then secure the Gate Bracket using the most appropriate means.



Remove the operator before welding, if welding is required.

If this is not the case or the operator does not have enough stroke for the gate to open fully, re-check the A- and B-Values on [Page 23 - Page 25](#).

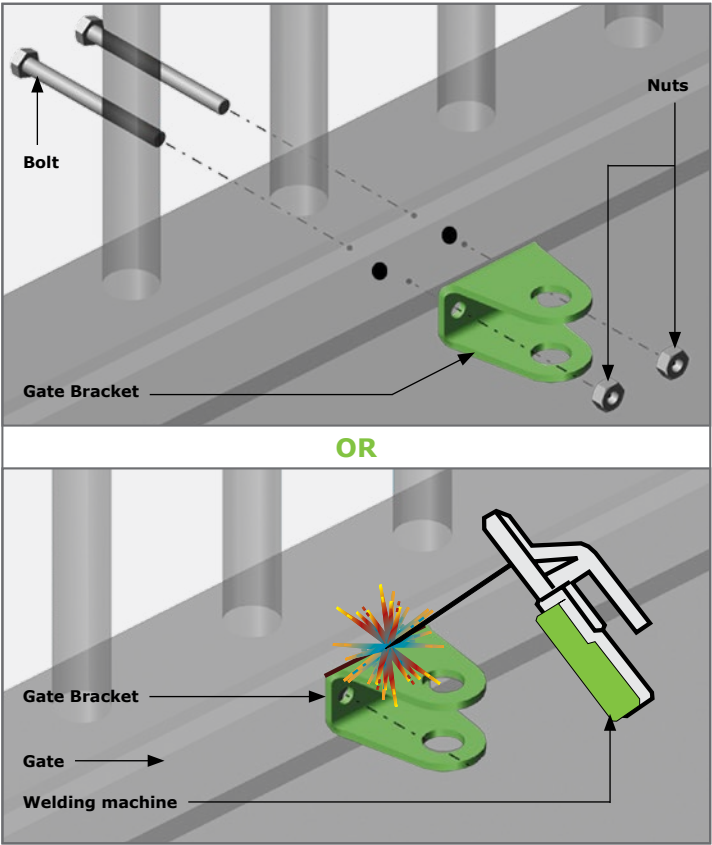


FIGURE 26

Attach warning labels to the inside and outside of the gate as shown.  
 The Mechanical part of the installation is now complete.

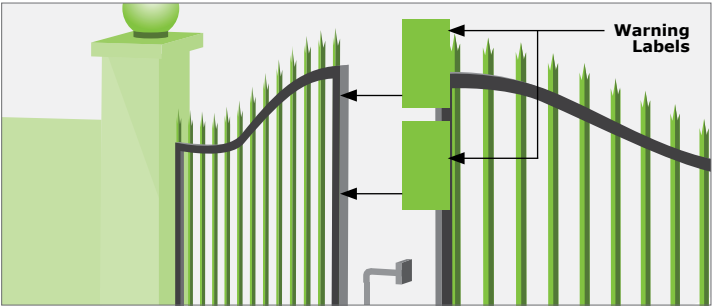


FIGURE 27

7. Operator Installation - Outward-Opening

7.1. New Site Installations

Depending on the gate opening angle determined in **Section 6.2**, refer to Figures 28 to 30 for the correct installation geometry. ⚙️

In most cases, it will be necessary to make up a suitable extension bracket in which to mount the operator's Wall Bracket.

**!** Ensure that the gate mass does not exceed the specifications on **Section 2.3. "Allowable Gate Masses"**. ⚙️

VANTAGE 300 SMART Outward-Opening Gate:

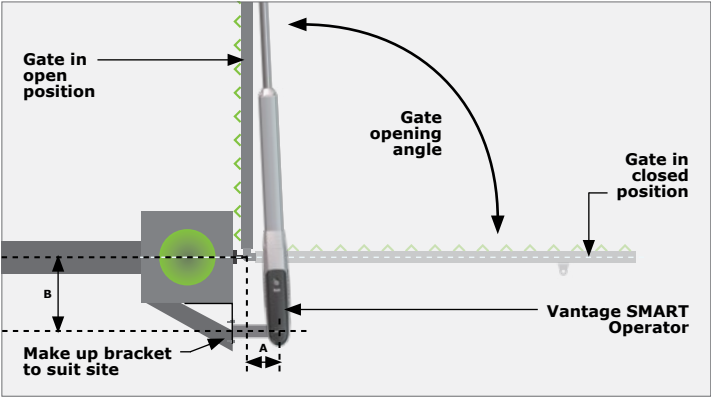


FIGURE 28. BRACKET POSITION - OUTWARD-OPENING GATE

VANTAGE 300 SMART Outward-Opening Gate Geometry Tables:

| Gate Opening Angle | A-Value | B-Value |
|--------------------|---------|---------|
| 90°                | 135mm   | 160mm   |
| 100°               | 140mm   | 130mm   |

TABLE 23

VANTAGE 400 SMART Outward-Opening Gate:

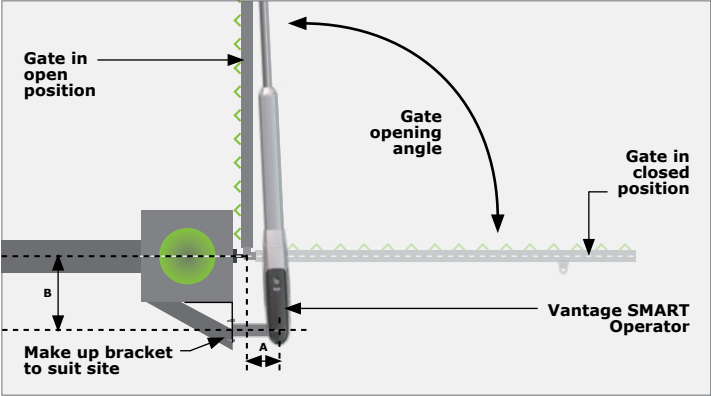


FIGURE 29. BRACKET POSITION - OUTWARD-OPENING GATE

VANTAGE 400 SMART Outward-Opening Gate Geometry Tables:

| Gate Opening Angle | A-Value | B-Value |
|--------------------|---------|---------|
| 90°                | 220mm   | 170mm   |
| 100°               | 210mm   | 150mm   |
| 110°               | 200mm   | 130mm   |
| 120°               | 185mm   | 135mm   |

TABLE 24

VANTAGE 500 SMART Outward-Opening Gate:

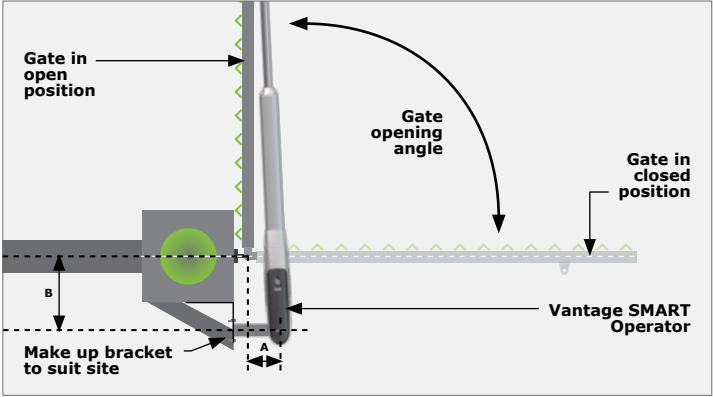


FIGURE 30. BRACKET POSITION - OUTWARD-OPENING GATE

VANTAGE 500 SMART Outward-Opening Gate Geometry Tables:

| Gate Opening Angle | A-Value | B-Value |
|--------------------|---------|---------|
| 90°                | 280mm   | 210mm   |
| 100°               | 265mm   | 180mm   |
| 110°               | 260mm   | 150mm   |
| 120°               | 248mm   | 140mm   |

TABLE 25

## SECTION 7

## OPERATOR INSTALLATION - OUTWARD-OPENING

Determine a suitable height for the Wall Bracket.



Ensure that this mounting height will allow the Gate Bracket to be securely mounted to the Gate Leaf.



**Take care to make sure the operator is mounted level.**

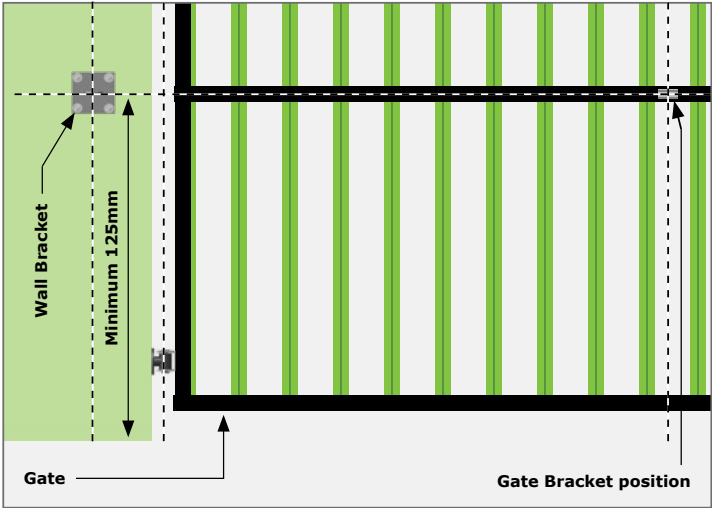


FIGURE 31. WALL BRACKET HEIGHT

Mark the calculated length required on the Wall Bracket.

Cut off excess length.

Insert the Wall Bracket into the mounting plate.

Weld the brackets together.

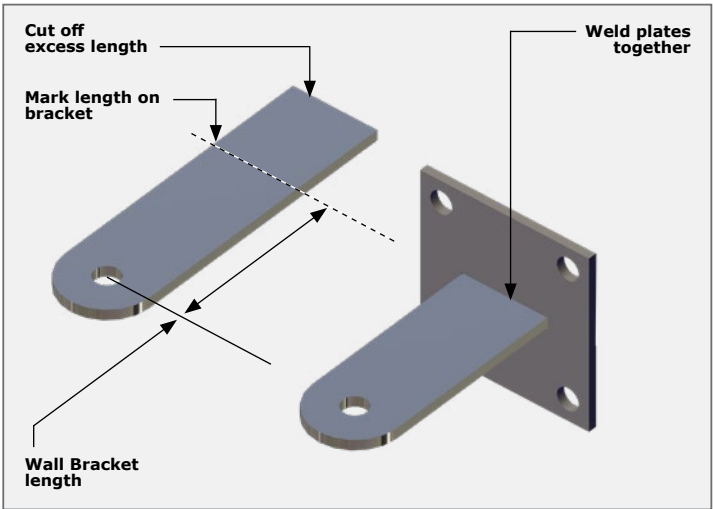


FIGURE 32. CUT AND WELD WALL BRACKET



## SECTION 7

## OPERATOR INSTALLATION - OUTWARD-OPENING

Mount the Wall Bracket according to the A- and B-Values obtained in

**Table 13 - Table 22.** 🌀



**It is critical that the Wall Bracket is securely mounted and is adequately rigid.**



See **Section 5 - "New Site Installation Preparation"**. 🌀

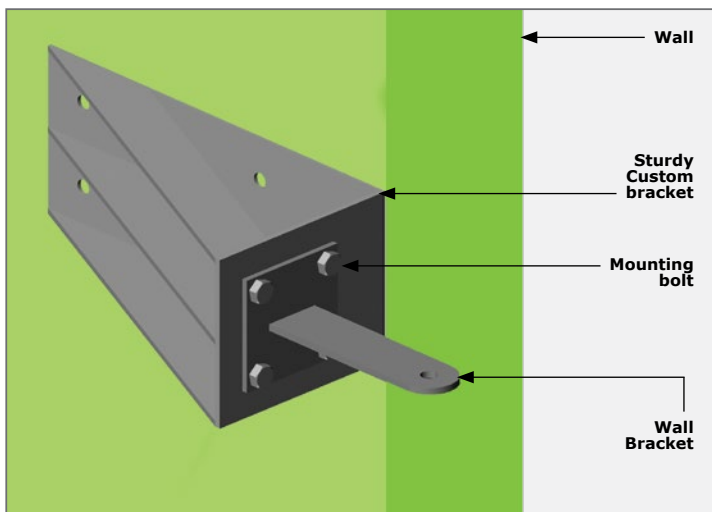


FIGURE 33

Fit the Gate Bracket to the **VANTAGE SMART** and secure it with a snap ring.



As additional security to the snap ring, fit a padlock and the optional padlock shield.

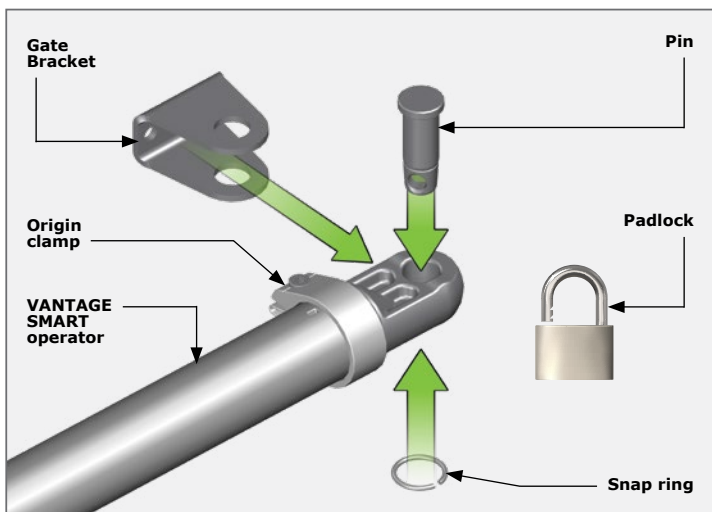


FIGURE 34

SECTION 7

OPERATOR INSTALLATION - OUTWARD-OPENING

Fit the motor end of the operator to the Wall Bracket.



**Support the operator to prevent damage.**

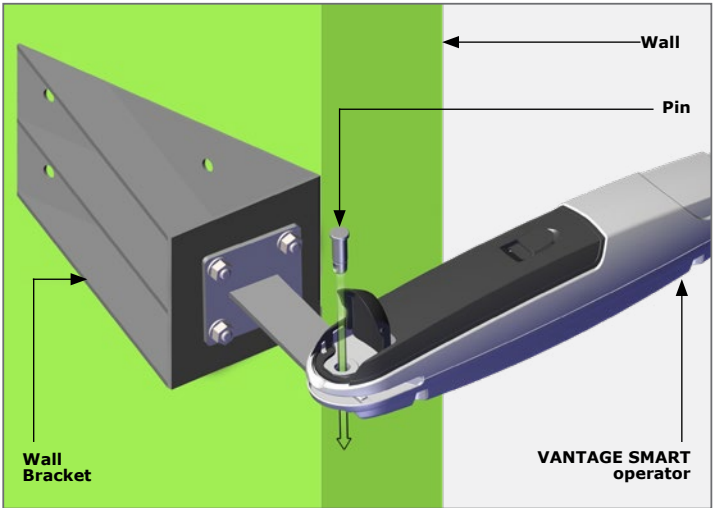


FIGURE 35

Manually rotate the piston to the fully-retracted position, and then extend it by half to one full turn.

With the gate in the closed position, use a G-clamp or spot weld the Gate Bracket in position to temporarily hold the Gate Bracket in place.



The G-clamp should only be used to secure the Gate Bracket in place, and should never be used as a means of securing the operator piston arm as this could result in damage.

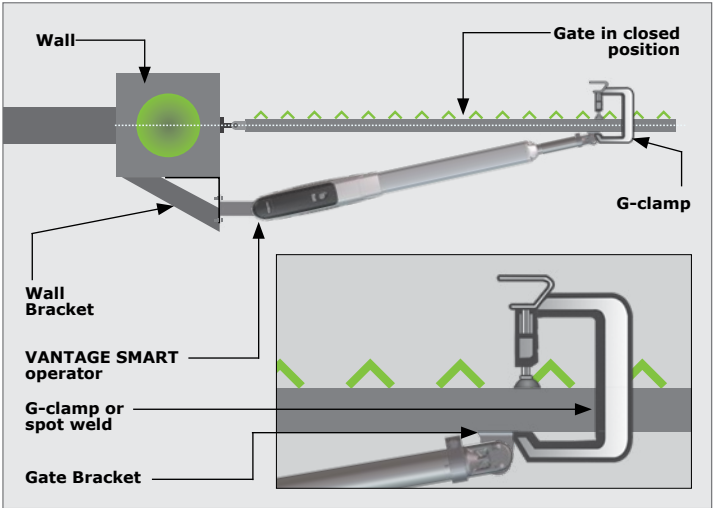


FIGURE 36

Manually release the operator using the key provided with the kit, and swing the gate to the desired open position.

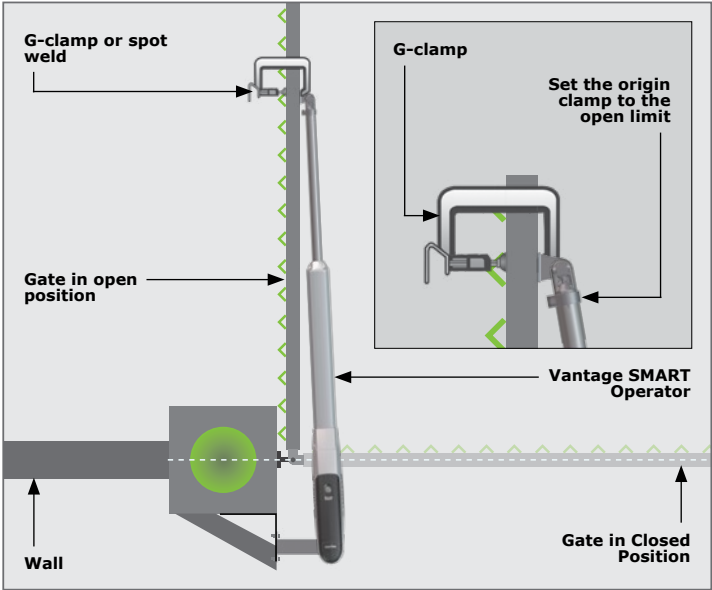


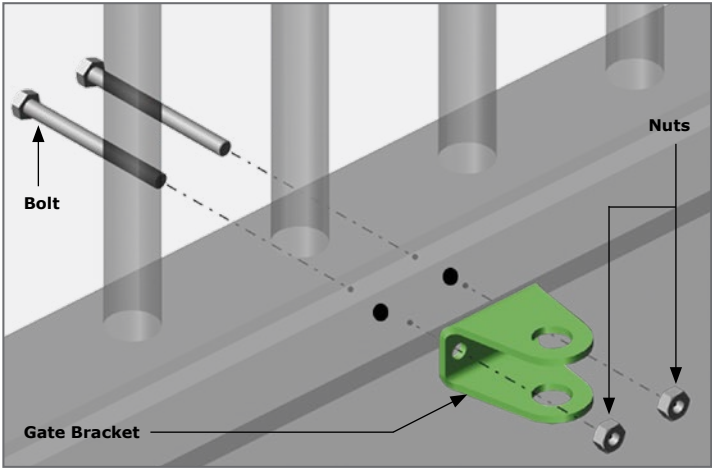
FIGURE 37

If the gate opening angle is sufficient and the operator is utilising the majority of its stroke, then secure the Gate Bracket using the most appropriate means.



Remove the operator before welding, if welding is required.

If this is not the case or the operator does not have enough stroke for the gate to open fully, re-check the A- and B-Values on [Table 13](#) - [Table 22](#).



OR

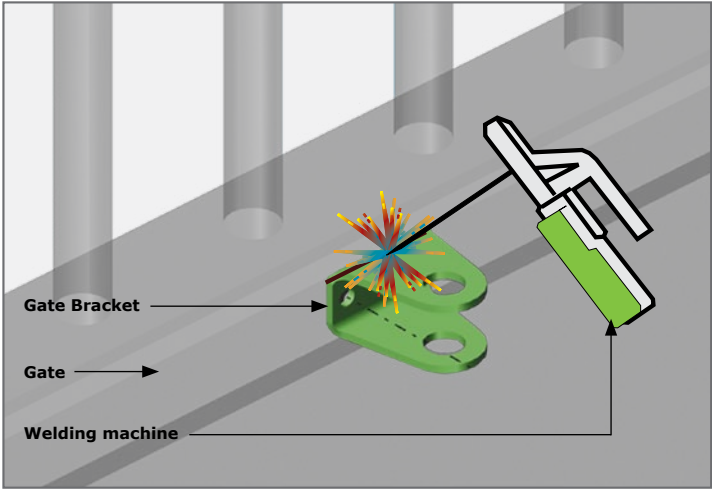


FIGURE 38

Attach warning labels to the inside and outside of the gate as shown.  
The Mechanical part of the installation is now complete.

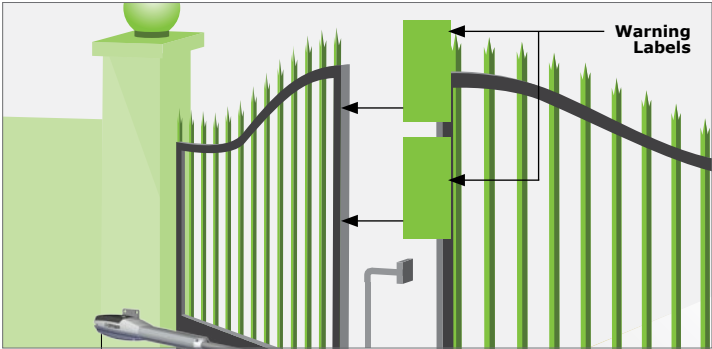


FIGURE 39

# 8. Electrical Setup

## FAST TRACK HYPERLINKS

### 8.1. Secure Vx SMART Wallbox to the Wall

#### 8.2. Wiring

- 8.2.1. Wiring Diagram Symbols
- 8.2.2. Wiring the Master Operator
- 8.2.3. Wiring the Slave Operator
- 8.2.4. Wired Closing Safety Beams (i5)
- 8.2.5. Double Wired Closing Safety Beams (i5)
- 8.2.6. Wired Opening Safety Beams (i5)
- 8.2.7. Wired Opening Safety Beams (Photon)
- 8.2.8. Double Wired Closing Safety Beams (Photon)
- 8.2.9. Wired Opening Safety Beams (Photon)
- 8.2.10. Photon SMART Wireless Beams
- 8.2.11. GLX900 Electronic Lock
- 8.2.12. Wiring for MagLock to Vx SMART Controller
- 8.2.13. Status LED
- 8.2.14. External Radio Receiver & Loop Detector
- 8.2.15. Holiday Lockout Keyswitch / Keypad
- 8.2.16. Pedestrian Keyswitch
- 8.2.17. G-ULTRA to Vx SMART Controller
- 8.2.18. Solar Panel
- 8.2.19. Pillar Light Pushbutton - Normally Open
- 8.2.20. Pillar Light Wiring
- 8.2.21. 12V Siren to Vx SMART Controller

### 8.3. Fuse Protection

### 8.4. Commissioning the System



#### ATTENTION!

1. Always check that the circuit breaker in the electrical panel is in the OFF position, and that all high-voltage circuits (more than 42.4V) are completely isolated from the mains supply before doing any work.
2. Ensure that all low-voltage systems (less than 42.4V) are suitably protected from damage, by disconnecting all sources of power such as chargers and batteries before doing any work.
3. All electrical work must be carried out according to the requirements of all applicable local electrical codes.

### 8.1. Secure Vx SMART Wall Box to Wall

Secure the Vx SMART Wall Box to the wall using the most appropriate means.

Be sure to position the Wall Box so as not to cause any hazards during and after the installation. Preferably mount the Wall Box:



- Out of direct sunlight
- At a comfortable working height
- Away from garden sprinklers, etc.
- To allow easy access even when the gate is open



Mount the Vx SMART Wall Box preferably at a comfortable working height.

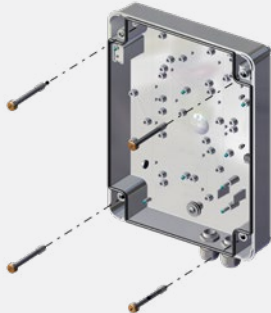


FIGURE 40

8.2. Wiring

When wiring each operator back to the **Vx SMART** Wall Box, it is recommended to mount a small junction box adjacent to each operator. Terminate the cable provided on the operator into this junction box and then route a new cable from the junction box to the **Vx SMART** Wall Box.

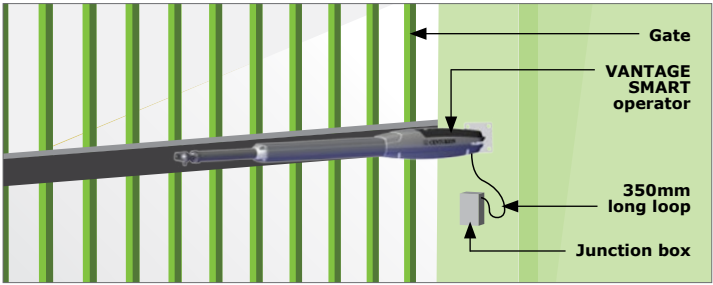


FIGURE 41

- It is essential that the cable is tied off in such a way that a 350mm long loop is formed between where the cable exits the back of the operators, and either the mounting bracket or Wall Box, in order to minimise flexing of the cable
- If a sharp bend is introduced to the cable, or a loop that is less than 350mm in length is used, the resulting cable fatigue, or excessive tension on the cable, may cause the operators to behave erratically or to stop operating altogether

Connect the charger and battery correctly.

**Ensure the Battery polarity is correct!**

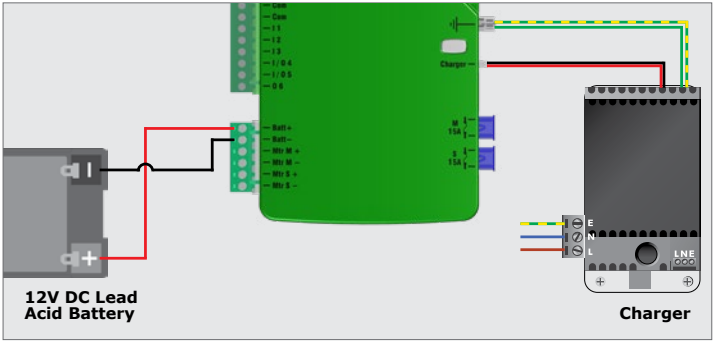


FIGURE 42

8.2.1. Wiring Diagram Symbols

The Wiring diagrams depicted on the following pages show the wiring of the **VANTAGE SMART** Master and Slave Motors to the **Vx SMART** Controller, as well as the wiring of the most commonly-used ancillary devices to the **Vx SMART** Controller.

Where applicable, an icon has also been provided to indicate whether the connection should be Normally-Open or Normally-Closed.

The icons used as well as their denotive meanings are given in the following section.

To ease the installation, the gate motor wiring should be wired as per the images below.



- This ensures that on the first run of the motor in limits setup mode,
- the gate will always run open for an inward-opening gate
  - the gate will always run closed for an outward-opening gate

In both cases this will ensure that the piston retracts on the initial movement of the gate.

8.2.2. Wiring the Master Operator

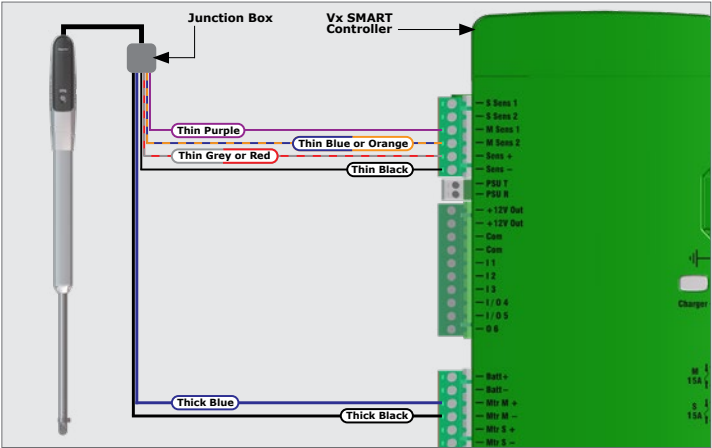


FIGURE 43

8.2.3. Wiring the Slave Operator

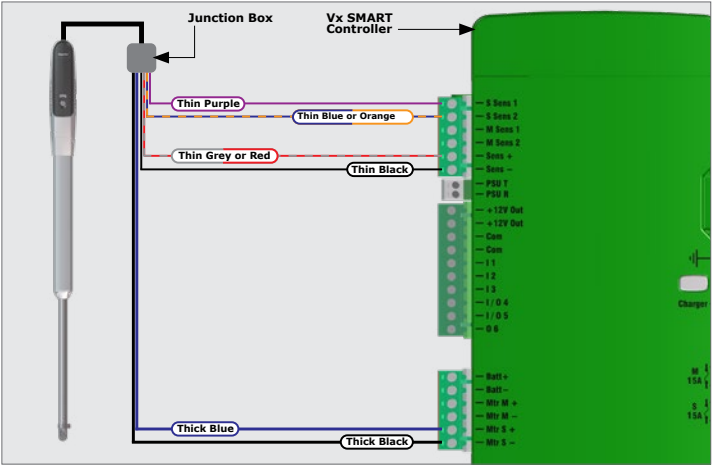


FIGURE 44

8.2.4. Wired Closing Safety Beams (i5)

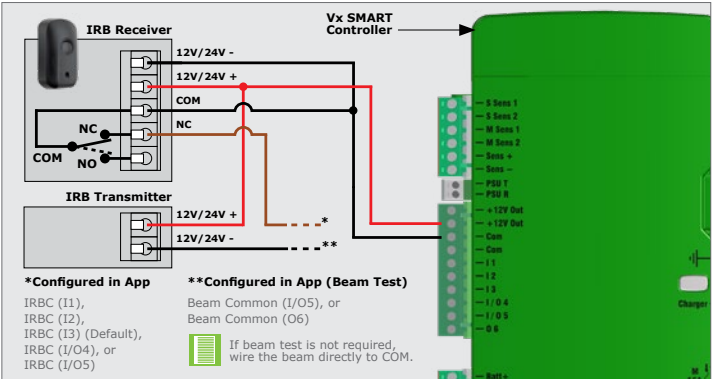


FIGURE 45

8.2.5. Double Wired Closing Safety Beams (i5)

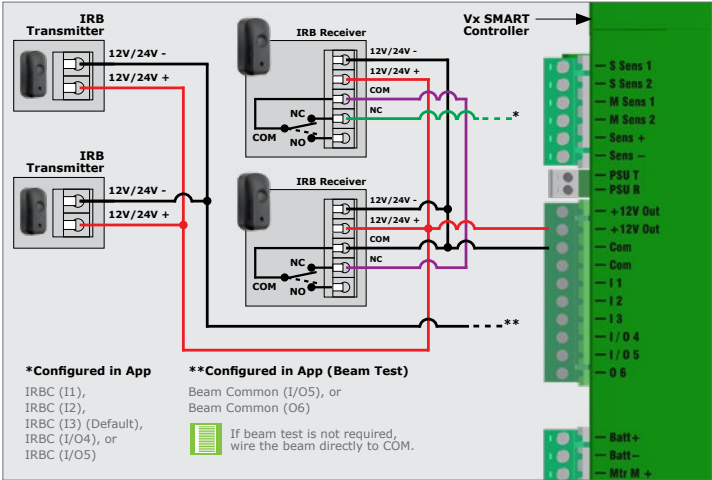


FIGURE 46

8.2.6. Wired Opening Safety Beams (i5)

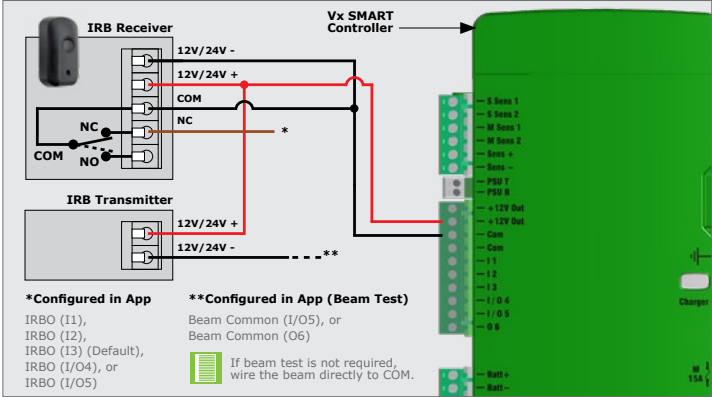


FIGURE 47

8.2.7. Wired Closing Safety Beams (Photon)

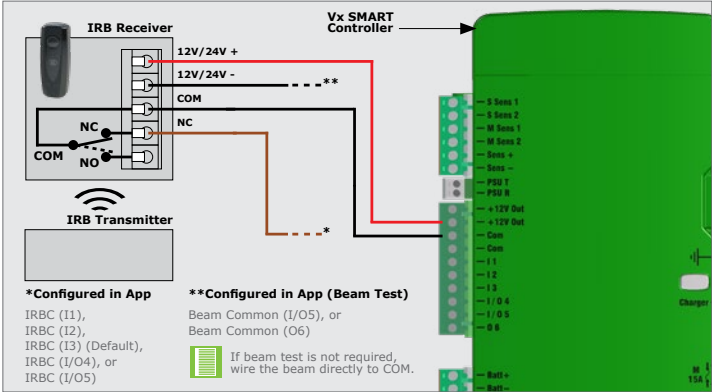


FIGURE 48



8.2.8. Double Wired Closing Safety Beams (Photon)

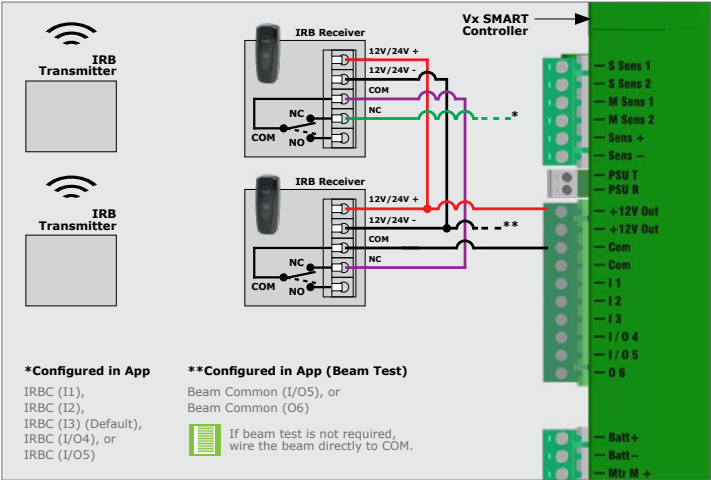


FIGURE 49

8.2.9. Wired Opening Safety Beams (Photon)

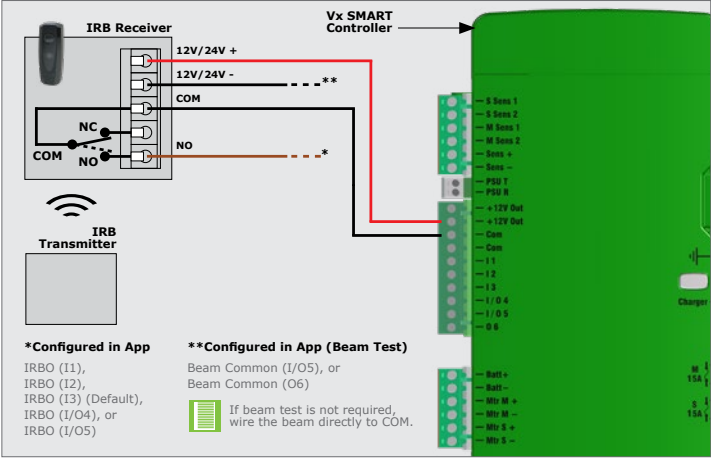


FIGURE 50

8.2.10. Photon SMART Wireless Beams

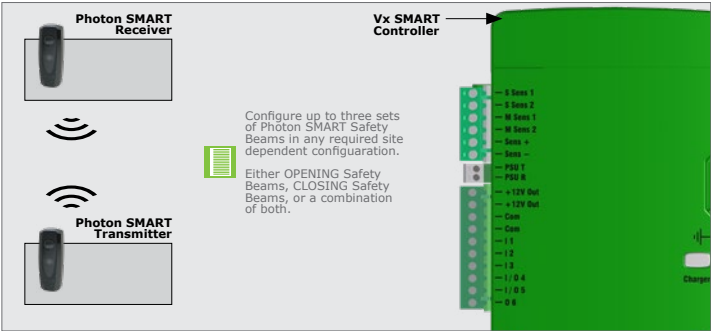


FIGURE 51

8.2.11. GLX900 Electronic Lock

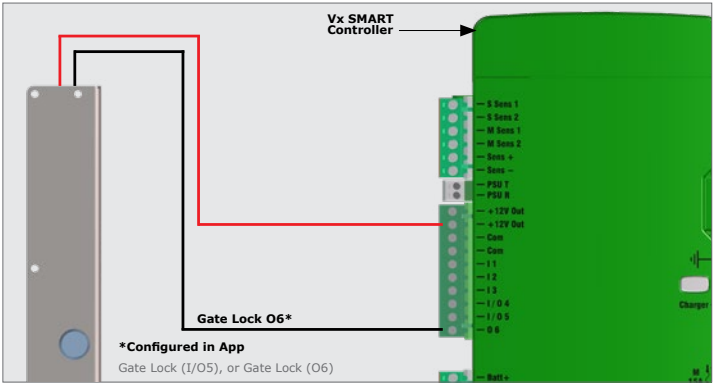


FIGURE 52

8.2.12. Wiring for MagLock to Vx SMART Controller

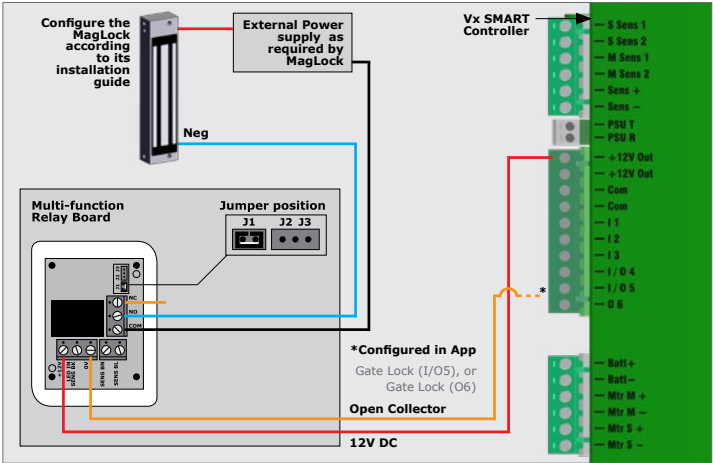


FIGURE 53



When using a Maglock on either I/O5 or O6, it is essential to use an interposing relay to energise and de-energise the Maglock. For proper Maglock operation, the Maglock must fully demagnetise. The **Vx SMART** Controller's built-in protection for Strike Locks, prevents the Maglock from demagnetising correctly.

8.2.13. Status LED

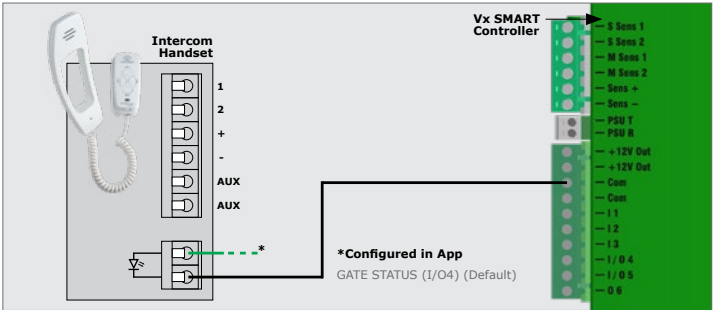


FIGURE 54

8.2.14. External Radio Receiver & Loop Detector

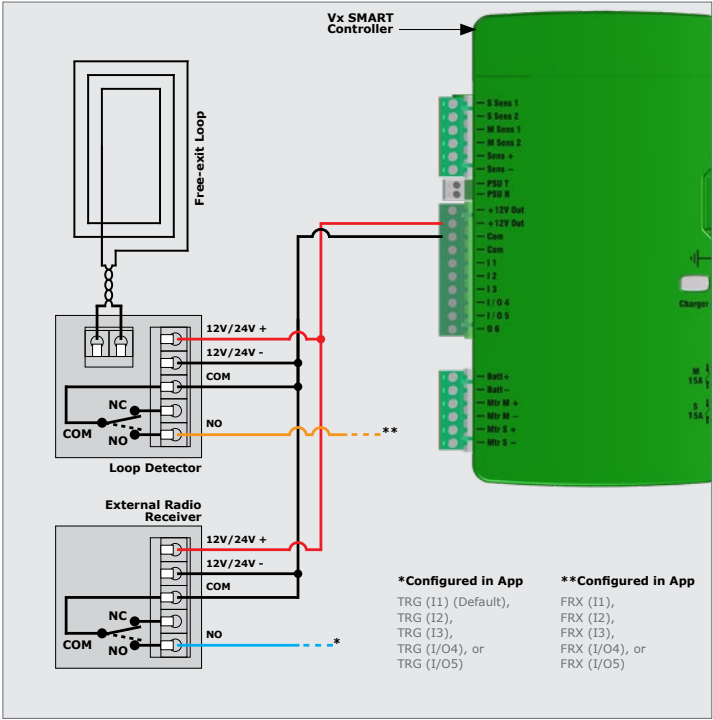


FIGURE 55

8.2.15. Holiday Lockout Keyswitch/Keypad

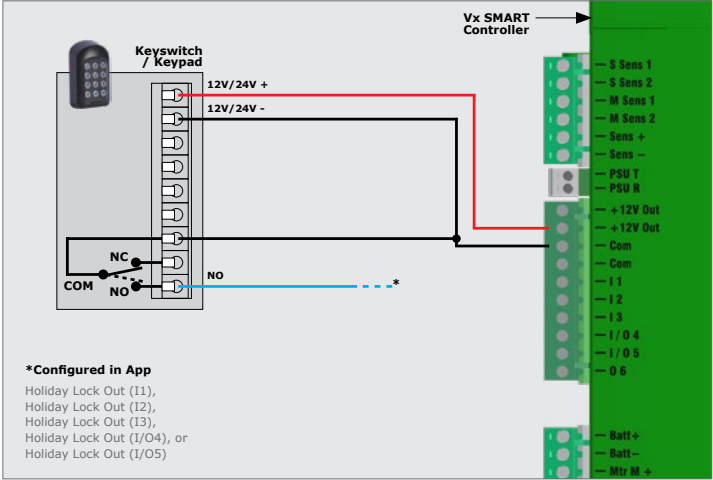


FIGURE 56

8.2.16. Pedestrian Keyswitch

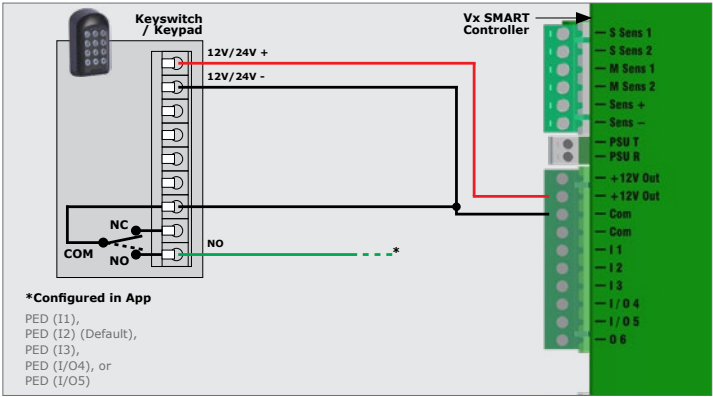


FIGURE 57

8.2.17. G-ULTRA to Vx SMART Controller

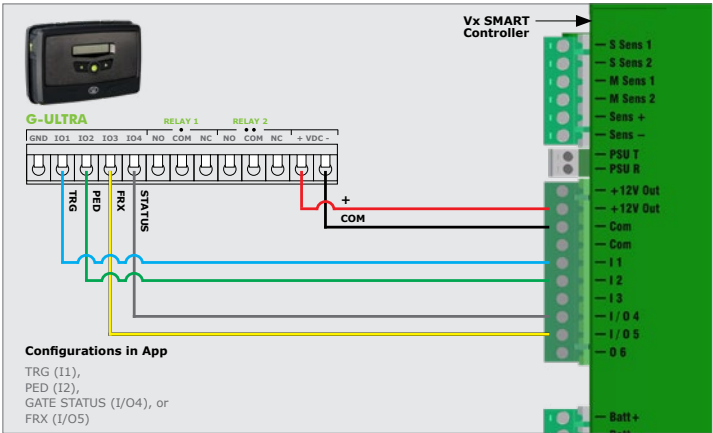


FIGURE 58

8.2.18. Solar Panel

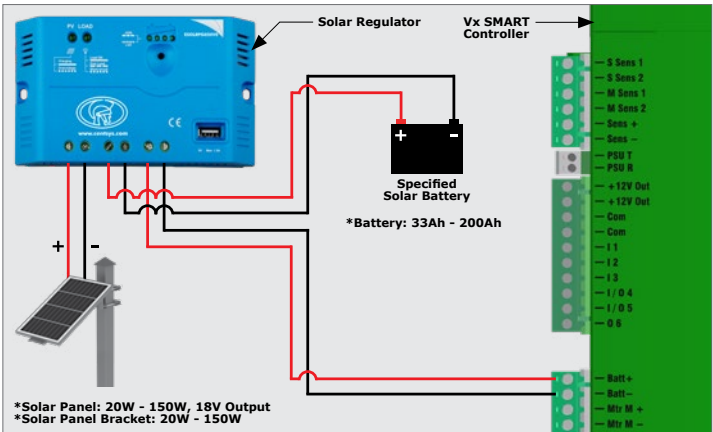


FIGURE 59

### 8.2.19. Pillar Light Pushbutton - Normally-Open

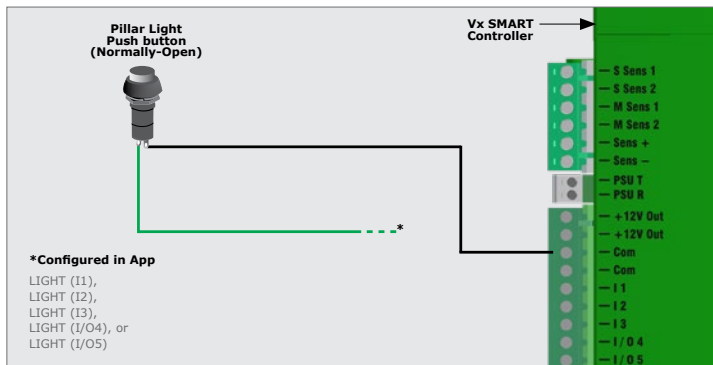


FIGURE 60

### 8.2.20. Pillar Light Wiring

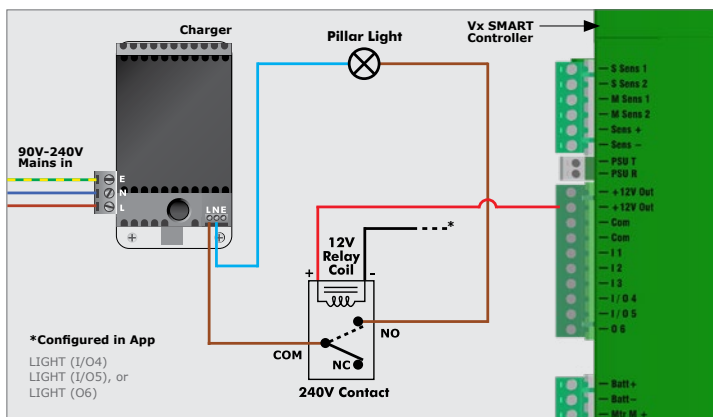


FIGURE 61

### 8.2.21. 12V Siren to Vx SMART Controller

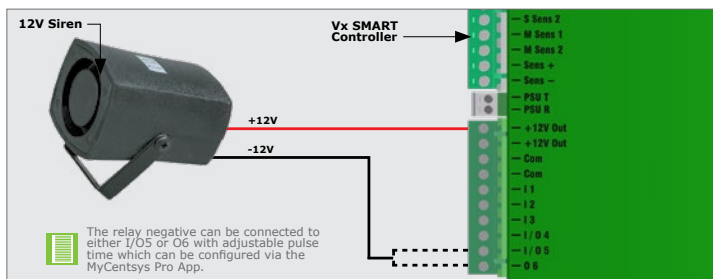


FIGURE 62

### 8.3. Fuse Protection

|                        | Type            | Rating       |
|------------------------|-----------------|--------------|
| Main Control Card      | Serviceable     | 2 x 15A      |
| Aux. Supply            | Resettable Fuse |              |
| Charger (Mains Supply) | Non-serviceable | 3A slow-blow |

TABLE 26

## 8.4. Commissioning the System

1. Scan the QR Code in Figure 63.
2. Select the App Store applicable to the operating system being used, either Apple App Store, Android Google Play Store or the Huawei App Gallery.
3. Download and install the application.

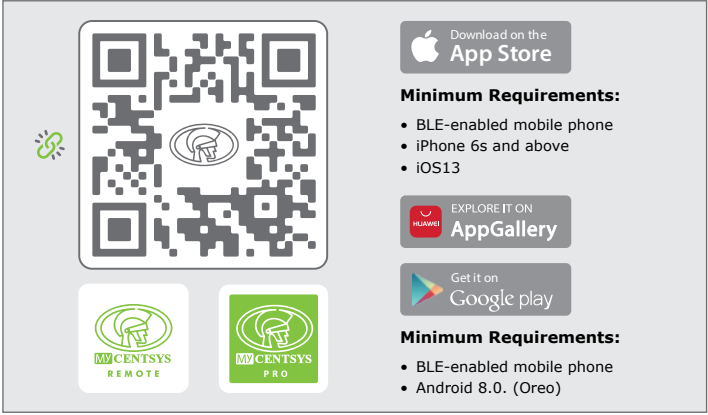


FIGURE 63

Alternatively, go directly to the app store of the operating system being used, and search for the app "**MyCentsys Pro**". Download and install the application onto the smartphone.

1. Once installed, open the application.
2. From the list of operators, select the operator that is applicable to this installation.
3. Connect to the relevant operator.
4. Use the app by following the prompts to configure the **VANTAGE SMART**.

### 8.4.1. MyCentsys Remote Application

Introducing an intuitive and user-friendly commanding hub for all SMART and ULTRA devices. MyCentsys Remote puts the ultimate in control and flexibility at your fingertips, delivering an all-in-one, fully-customisable experience for your compatible access automation solutions. Download MyCentsys Remote free by scanning the QR code.

1. Scan the QR Code in Figure 63.
2. Select the App Store applicable to the operating system being used, either Apple App Store, Android Google Play Store or the Huawei App Gallery.
3. Download and install the application.

Alternatively, go directly to the app store of the operating system being used, and search for the app "**MyCentsys Remote**". Download and install the application onto the smartphone.

1. Once installed, launch the application.
2. Register with the relevant details.
3. Select the "+ SMART".
4. From the list of operators, select the operator that is applicable to this installation.
5. Wait for the "Device Added" message after tapping on the selected operator.
6. Select the operator on the home screen to view all available triggers and device status.

## 9. Product Ancillaries



### Solar Supply Solution

Alternative means of powering the system - consult your CENTURION dealer



### Pedestrian Keyswitch

Basic key-operated switch for allowing access for pedestrians



### G-ULTRA

The ultimate GSM solution for monitoring and activating the operator via your mobile phone



### SMARTGUARD or SMARTGUARDair Keypad

Cost-effective and versatile wired and wireless keypad, allowing access to users with a customised code



### 12V-24V SMART Siren

A top-notch security companion, designed to seamlessly integrate with your existing SMART gate and garage door operators



### Photon SMART Safety Beams

Fully-wireless infrared beams. Always recommended on any SMART automated installation



### Gate Stations

Communication hub for the G-SPEAK ULTRA GSM intercom - available in both durable plastic and stylish and strong metal enclosures



### G-SPEAK ULTRA

Answer your intercom from anywhere for maximum security and convenience - powered by 4G technology



### FLUX SA Loop Detector

Allows free-exit of vehicles from the property - requires ground loop to be fitted



### Intercom Handset

Allows visitors to communicate with people inside in order to gain access to the property



### Controller Wallbox

A fully weatherproof wall-mounted enclosure for the operator's controller electronics

## 10. Installation Handover Checklist

The final step in delivering a comprehensive service to the customer, is to ensure a smooth handover of the site. Proper training for users is crucial for the safe and effective operation of the automated gate system. Follow this guide to provide thorough training to users: Never assume the user knows how to safely operate an automated gate.

### 10.1. Manual Release Mechanism

- Demonstrate how to operate the Manual Override mechanism
- Hand over the keys to the client

### 10.2. Obstruction Detection and Safety Features:

- Demonstrate the functioning of obstruction detection and other safety features
- Demonstrate the functioning of the Safety Beams and any additional features such as PIRAC, Break-in Alarm and Ambush Alarm
- Ensure that users are aware of the system's capability to respond to potential hazards; a useful tool for this purpose will be the operator overview and notifications in the MyCentsys Remote App

### 10.3. Operator Features and Benefits

- Provide a detailed overview of all features that have been configured, including the accessories
- Highlight the role of each feature configured in enhancing the functionality and safety of the system
- Assist the client in setting up their MyCentsys Remote App and explain how the MyCentsys Remote App performs actions and delivers notifications
- Explain how the NOVA remotes work and which button performs which function
- Demonstrate how the courtesy/warning light works
- Explain how remotes can be added with MyCentsys Pro (Optional)

### 10.4. Safety Considerations:

- Stress the responsibility of users in passing on safety knowledge to others
- Communicate the following safety considerations:
  - Do not activate the gate unless the area of travel is clear
  - Avoid crossing the path of a moving gate
  - Children should not operate or play with gate controls
  - Maintain a safe distance from moving parts
  - Show the customer that all the necessary safety mechanisms have been installed on the physical gate (i.e. end-stops, catch-bracket, guide-rollers etc) to ensure safe operation of the physical gate
  - Secure all easily-accessible gate operator controls to prevent unauthorised use of the gate

### 10.5. Gate Operator Controls

- Instruct users to secure gate operator controls to prevent unauthorised use
- Emphasise the importance of controlling access to the gate system

### 10.6. Maintenance and Checks

- Highlight the need for regular maintenance to ensure optimal system performance



## SECTION 10

- Run through parts that need to be maintained and checked regularly (i.e. track, wheels, end-stops, guide-rollers, catch-brackets, rack, Operator health via application, ensure that there is no insect ingress present in the operator)
- Check if the obstruction detection system and safety devices for correct operation are in working order once a month
- Make the client aware that the gearbox is pre-filled with oil and that the SMART operator does not require any routine maintenance

**10.7. Authorised Service:**

- Communicate that all repair and service work must be performed by a qualified Centurion Systems professional
- Reinforce the importance of adhering to the guidelines for system integrity and warranty

**10.8. Product Use and Liability:**

- Emphasise that the product is designed for a specific use, and any other use may compromise the safety and warranty of the product
- Make users aware of their responsibility in using the product as documented

**10.9. Centurion Systems (Pty) Ltd Disclaimer:**

- Communicate Centurion Systems' disclaimer about product liability
- Centurion Systems (Pty) Ltd does not accept any liability caused by improper use of the product, or for use other than that for which the automated system was designed. Ensure that the customer has the User Guide and that you have completed the installation details in the back of the User Guide
- Reinforce the importance of proper use to avoid any potential dangers
- Remember, a well-informed user is a key factor in maintaining the safety and longevity of the automated gate system. Thank you for your commitment to delivering excellence in service!

**10.10. MyCentsys Pro and MyCentsys Remote**

- The applications have been created with security in mind; if the user has security concerns, the following can be highlighted:
- Any new connection to the operator with the MyCentsys Pro app needs to be authorised, by opening and closing the manual override. If a phone number has been added as an admin user, the user can connect without authorisation as the user is verified to connect to the operator. This will ensure that any would-be intruder can't access the programming to open the gate
- MyCentsys Remote users can only activate the operator if their number has been added as an App Remote user. If the mobile number of the user has not been added, no connection can take place. This will ensure that any would-be intruder can't access the activations to open the gate

# 11. Warranty Information



You can register your product(s) online at [www.centsys.com](http://www.centsys.com), which will assist you in keeping a record of your date of purchase or installation, serial numbers, etc.

All of our products are manufactured with extreme care, thoroughly inspected and tested.

The goods supplied by us shall be subject to the provisions of sections 55 to 57 of the Consumer Protection Act (68/2008) except where the provisions of the warranty contained in our product documentation are more favourable to the purchaser.

Subject to the warranty contained in our product documentation, if applicable, our products are warranted for a period of twenty-four months after delivery.

However, it is expressly noted that batteries carry a six month warranty due to the nature of these products being such that they are subject to possible misuse. Please note that warranties will be honoured on a carry-in basis; in other words, the product in question must be taken in to one of our branches, or to the authorised reseller that the product was purchased from, for assessment and, if necessary, repair.

For equipment not of our manufacture, the warranty as supplied by the original manufacturer will apply if such warranty is more favourable to the purchaser than the relevant provisions of the Consumer Protection Act (Act 68/2008 of South Africa), or any other applicable law

as so required in different countries in which the product was sold.

Such warranty is valid only once full payment has been received for such goods.

## Australian customers:

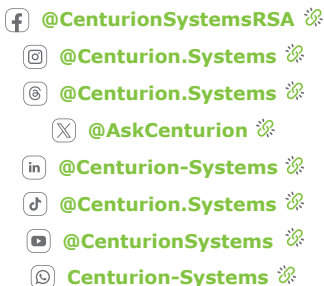
Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure

## Any warranty may be voidable on any equipment which:

1. Has not been installed in accordance with the installation instructions provided.
2. Has been subject to misuse or which has been used for any purpose other than that designed for by the manufacturers.
3. Has damage caused as a result of handling during transit, atmospheric conditions (including lightning), corrosion of metal parts, insect infestation, power surges or other forces outside of the control of the manufacturer.
4. Has been repaired by any workshop and / or person NOT previously authorised by the manufacturer.
5. Has been repaired with components not previously tested, passed or authorised by Centurion Systems (Pty) Ltd, South Africa or one of its subsidiary companies.



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[www.support.centsys.co.za](http://www.support.centsys.co.za)

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