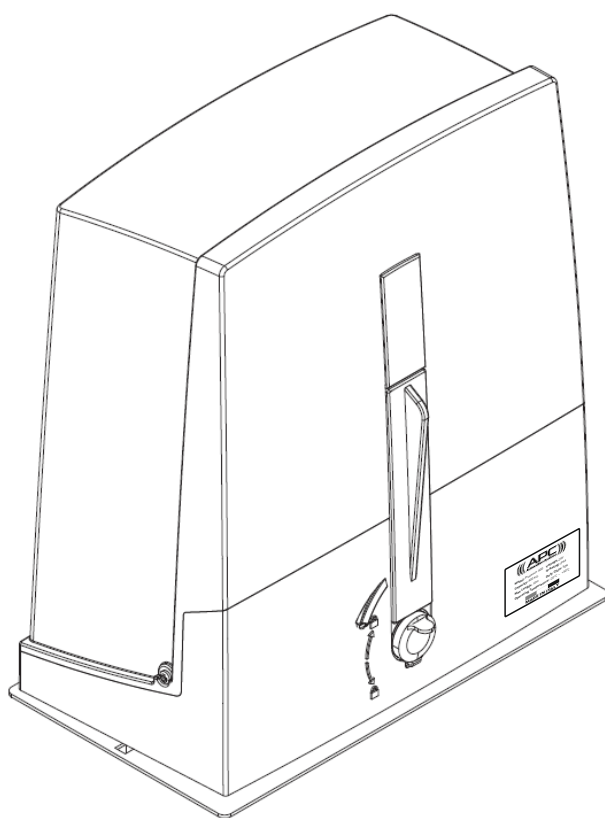




## **PROTEOUS 400 Installation Manual**



### **Attention Installer**

The manual should be read cover to cover at least once prior to beginning installation

**It is absolutely critical to set the operating direction (Left/Right) and the striker plates PRIOR to operating the system**



# Table of Contents

**Page 1**

Preliminary Checks  
Safety Information

**Page 2**

System Dimensions  
Specification and Features  
Emergency Override/Manual Override

**Page 3**

System Overview  
Installation Layout

**Page 4**

Control Board Overview

**Pages 5 to 8**

Installation whilst pouring concrete

**Pages 9 to 11**

Installation after pouring concrete

**Page 12**

Transformer Connection

**Page 13**

Solar Panel Assembly and Placement

**Page 14**

Solar box mounting and Wiring

**Page 15**

Wireless Equipment Pairing  
Wireless Button Configuration  
Wireless Keypad Programming

**Page 16**

Wireless Equipment Usage and Operating Distances  
Party mode

**Page 17**

Dip Switch Settings

**Page 18**

Dip Switch Settings cont.

**Page 19**

Gate Learning Cycle

**Page 20**

Photocell and Reflective Sensor Wiring

**Page 21**

Intercom and GSM wiring

**Page 22**

WiFi Switch and Keypad Wiring  
Wired Keypad Programming

**Page 23**

Push Button Wiring

**Page 24**

Courtesy Light and Antenna Wiring

**Page 25**

Compatible Equipment and Warranty Terms

## Preliminary Checks

To ensure safety and an efficient automation make sure the following requirements are met:

1. The gate structure must be suitable for automation.
2. Make sure that the gate move properly and uniformly without any irregular friction during their entire travel.
3. The gates wheels and track must be in good condition with no biting, no rust and must be well greased.
4. The gates should be able to be freely opened and closed before installing the gates automation system.
5. It is strongly suggested to have a gate stop installed for the open position for setup and emergency purposes.

## Important Safety Information

Installer and owners should observe the following:

1. Make sure that there is sufficient space for the gate to slide open fully without interference.
2. The control Panel Box must be installed in the area within 9 meters maximum cable distance from motor.
3. Do not change with parts or components not supplied by the manufacturer, this includes sensors, buttons, solar panels, transformers and any component not listed in the compatibility list.
4. Make sure all wiring works are correct and in good condition before connecting the battery, solar panel or transformer to the control panel.
5. Turn off the power and disconnect the battery when doing any maintenance.
6. Ensure the control panel box is free from water leakage to avoid short circuiting of the control panel.
7. Do not supply mains power directly to the motor, control box or any accessories.
8. Do not install the operating system if in doubt. Contact the manufacturer.
9. Do not cross the gate while it is operating, Safety sensors are only to prevent accidents or injuries.
10. Keep the remote controls in safe place and away from children.

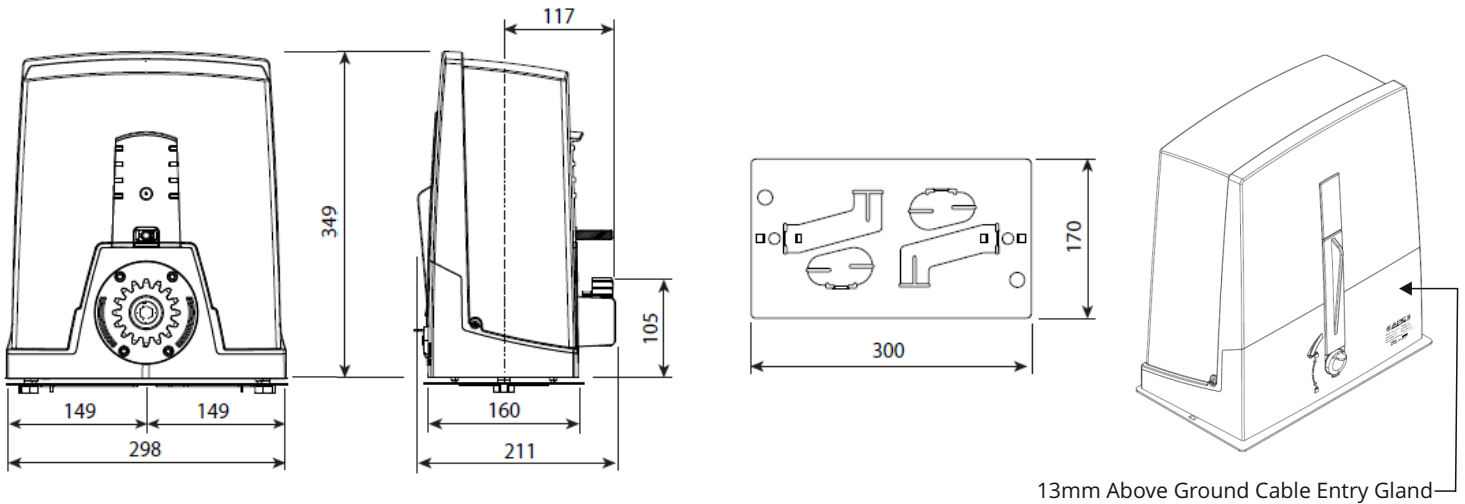
Before beginning installation the manual should be read thoroughly concerning all aspects of the installation including all precautions and safety information.

Proper steps should be taken to ensure efficient and safe installation for vehicles, property and persons within the operators working radius.

The system is fitted with an over current sensing feature to assist in preventing damages, injuries and death. All precautions must be taken by the installer that adjustments are set correct based on the gates weight, height and length. The system sensitivity should be set to allow consistent operation of the gates under normal operating conditions. This does not include operating against wind. The system may not detect (Over current sense) against light loads such as small object, young children and animals. It is the operators duty to ensure that the area is clear prior to operation. Photo sensors or Reflective sensors should always be installed to assist in accident or death prevention. Rubber edging should be installed onto the gates to assist in dampening any accidents or damages.

You agree to install this product following any and all safety requirements listed in this manual or required under local, state or national regulations. APC Automation Systems, its distributors, stockist or sellers are not liable for any direct, indirect, incidental, special or consequential damages or loss of profit wether based in contract or any other legal theory during the course of warranty or afterwards. If you do not feel capable of properly installing the operator based on the above information or otherwise do not proceed.

## System Dimensions



## Motor Specifications

<b>IP Rating</b>	IP 44
<b>Voltage</b>	24V DC
<b>Maximum Length</b>	10M
<b>Capacity</b>	400KG
<b>Thrust</b>	350N
<b>Duty Cycle</b>	50%
<b>Operating Temperature</b>	-20° ~ 55°C

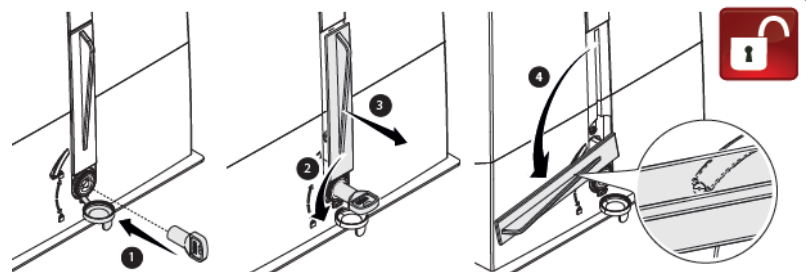
## Control Panel Features

- Onboard Rectifier
- Over Current Sensitivity (Adjustable)
- Decoder Technology
- Automatic Learning of Gate
- Adjustable Slowdown Speed
- Remote and Wireless Button Compatibility
- Automatic Close (1s to 120s Adjustable)
- Photocell/Safety Device Connection
- Input for Push Button, keypad, fingerprint reader etc.
- Courtesy Lamp Output

## Emergency Override

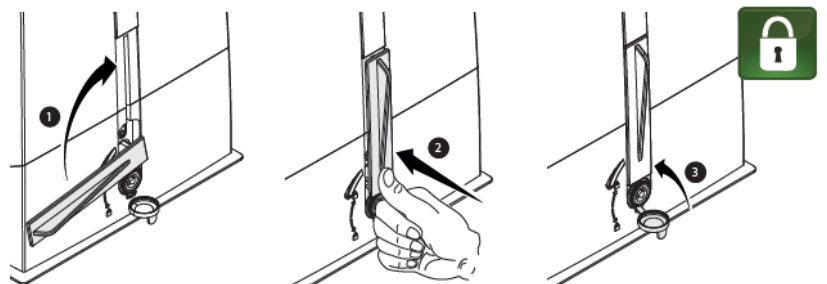
### Unlocking

1. Open the override passthrough and insert the triangle key.
2. Turn the key counterclockwise and the override lever will pop away from the case.
3. Pull the lever counterclockwise to release the system.



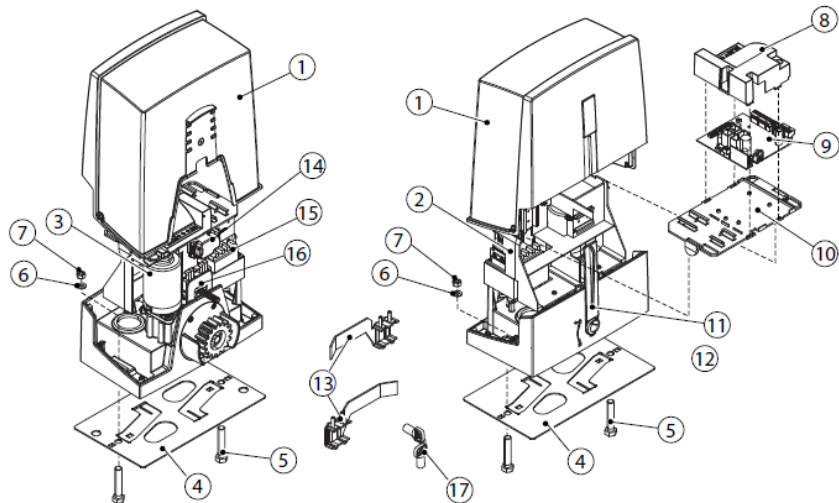
### Locking

1. Pull the lever clockwise to re-engage the system.
2. Push the lever back towards the case.
3. Close the passthrough cover.

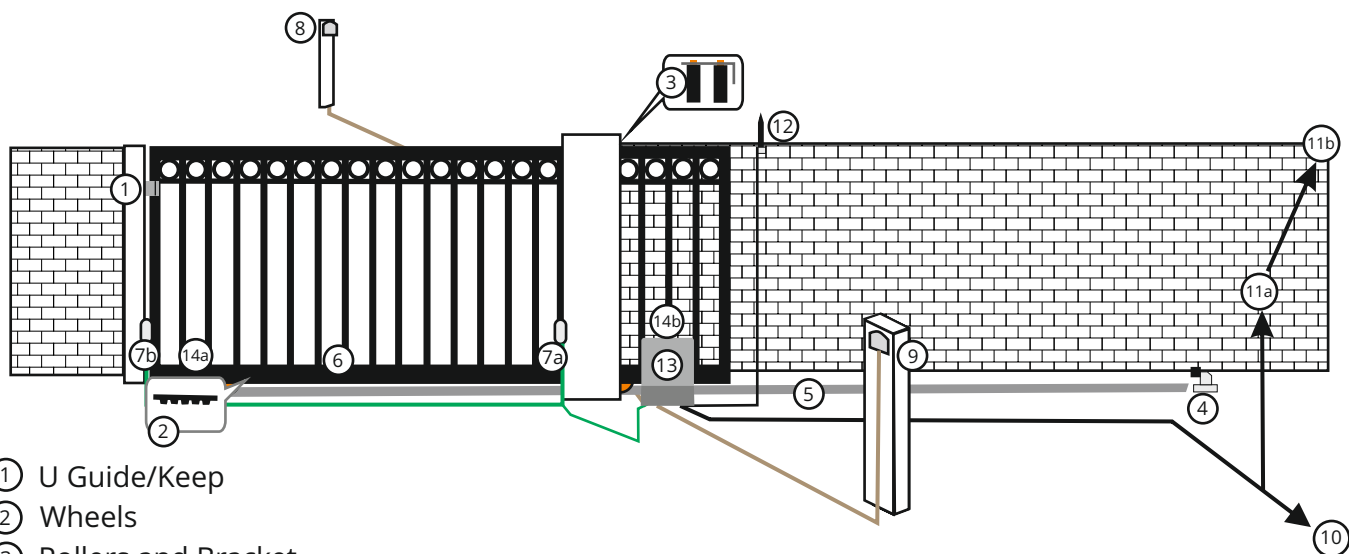
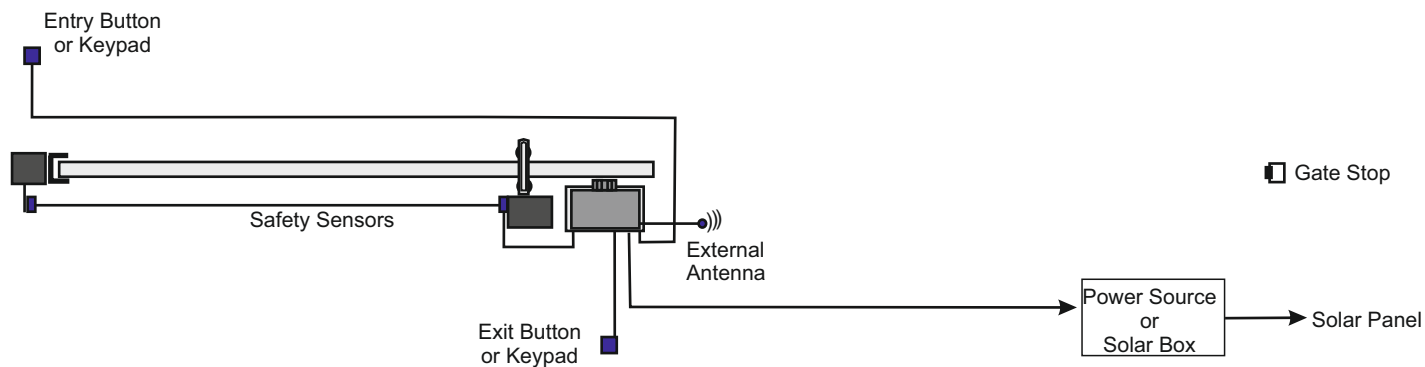


# System Overview

- 1. Cover
- 2. Internal Structure
- 3. Gear motor
- 4. Anchoring plate
- 5. Fastening bolts M12 60mm
- 6. Washer Ø 12
- 7. Nut M12
- 8. Board protection cover
- 9. Control board
- 10. Board-housing
- 11. Release lever
- 12. Lock
- 13. Limitswitch strikers
- 14. EMC02 card
- 15. Transformer
- 16. Limit Switches
- 17. Triangle Key



# Installation Layout



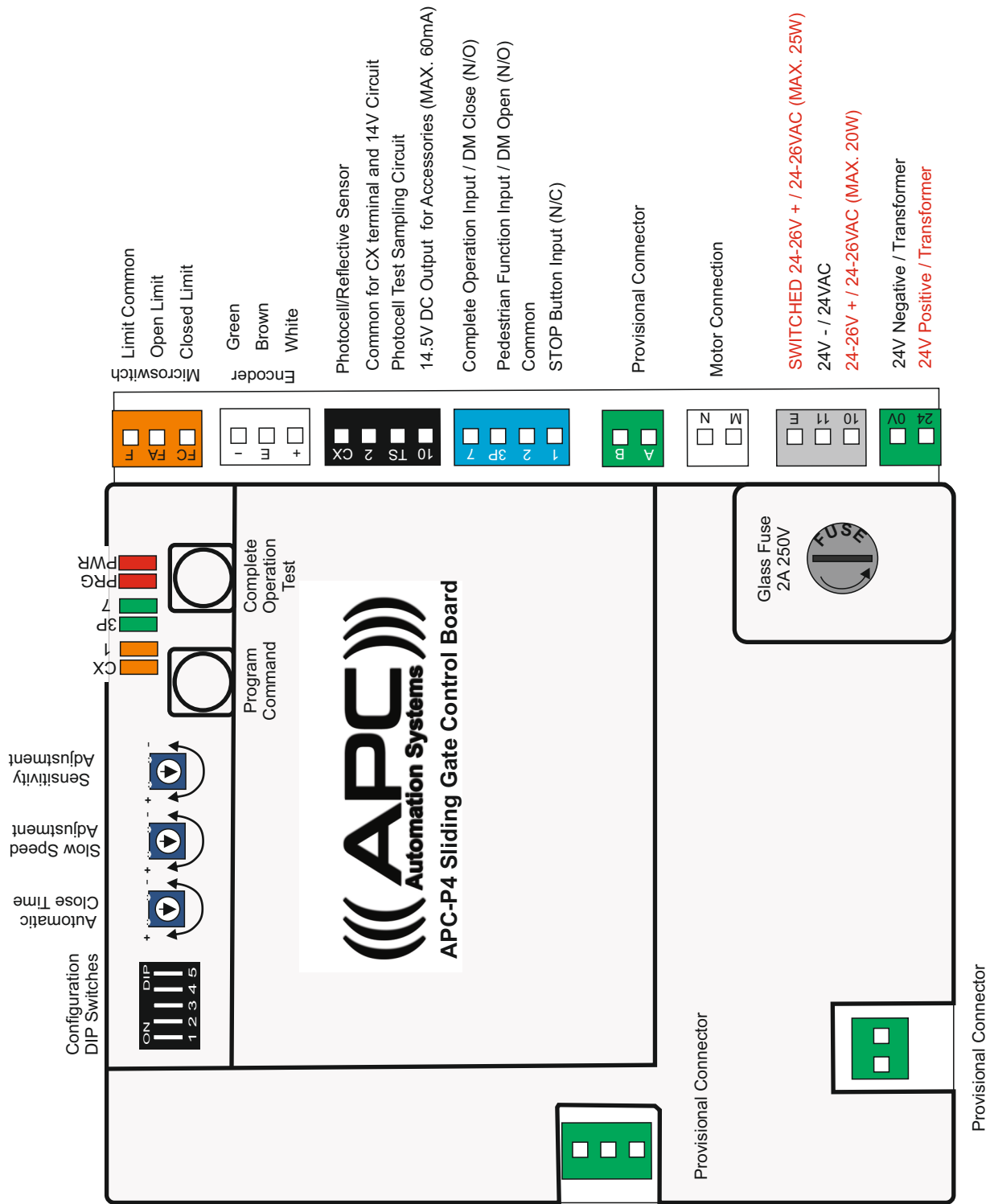
- ① U Guide/Keep
- ② Wheels
- ③ Rollers and Bracket
- ④ Gate Stop
- ⑤ Floor Track
- ⑥ Gear Rack
- ⑦a PE Sensor Transmitter
- ⑦b PE Sensor Receiver  
(Not required for Retro Reflective Sensor)
- ⑧ Entry Keypad/Push Button
- ⑨ Exit Keypad/Push Button

- ⑩ Power Source (Mains/Low Voltage)
- ⑪a Solar Box
- ⑪b Solar Panel
- ⑫ External Antenna
- ⑬ Gate Motor
- ⑭a Open Magnet
- ⑭b Close Magnet

### Requiring Wiring:

- Keypad - 4 Core (Wireless available)
- PBD-K - 4 Core (Wireless available)
- PBS-K - 2 Core (Wireless available)
- PE Sensor Receiver - 4 Core
- Transmitter - 2 Core

# Control Board Overview

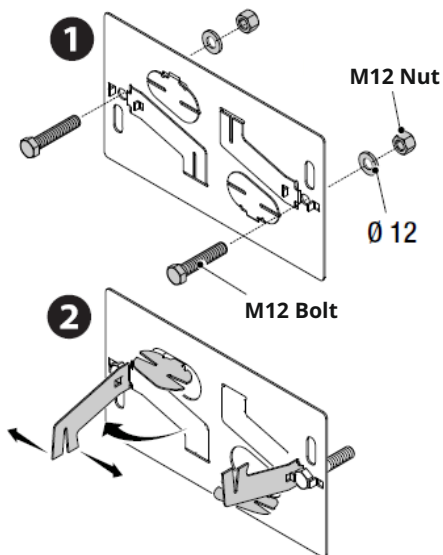
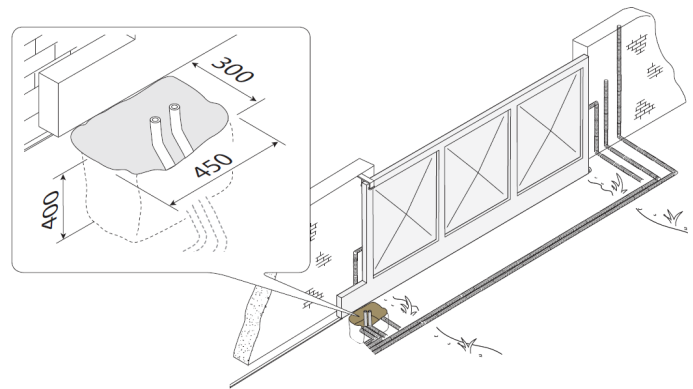


## Installation of the base plate during the pouring stage

### Step 1: Option 1

Dig a hole for the foundation form work.

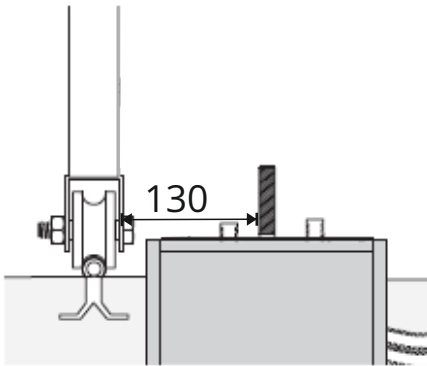
Set up the conduits needed for the wiring required for the installation including any accessories.



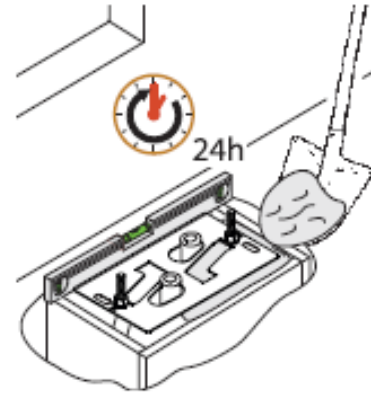
Fit the bolts into the anchoring plate and lock them using the washers and nuts. The bolt head should be facing downwards and the nut should be on the top side.

Pull away the pre-shaped clamps from the plate to a 90 degree position using a screw driver or pliers.

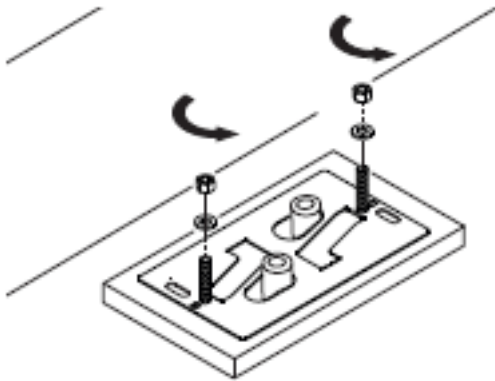
## Step 2: Installing the base plate



The 130mm measurements shown in the drawing is from the back of the gate to the centre of the bolts, use this as a reference in the next step.

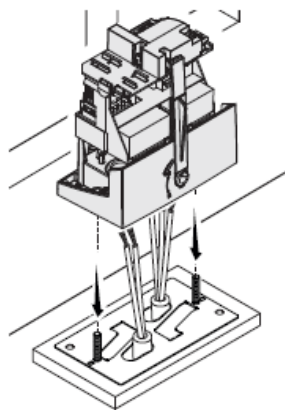
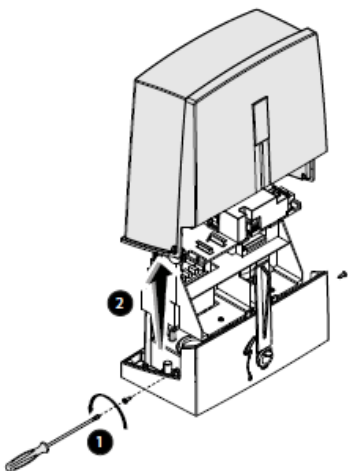


Fill the form with concrete then sink the plate in following the measurement guideline whilst ensuring the plate is perfectly level. Allow for a 24 hour **MINIMUM** cure time before proceeding.



Remove the nut and washer from the bolts.

## Step 3: Placing the motor

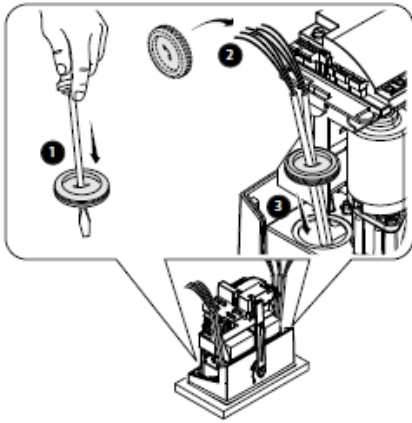


Remove the cover screws (one on each side).

Sit the motor on the base plate whilst feeding the cables through the holes in the casing.

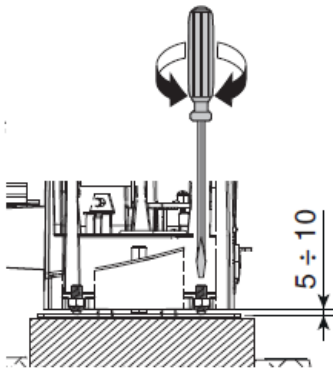


## Step 4: Cable pull through

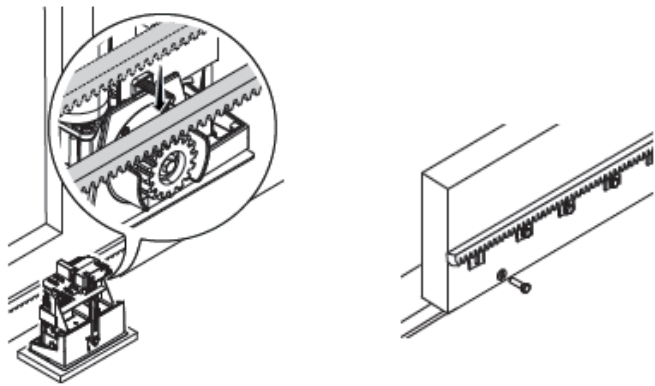


Cut the gland and thread the cable through then insert it into the bottom of the case.

## Step 5: Gear rack installation



Screw out all FOUR threaded height adjusters by 5mm to 10mm raising the motor off the concrete base.



Unlock the gate motor

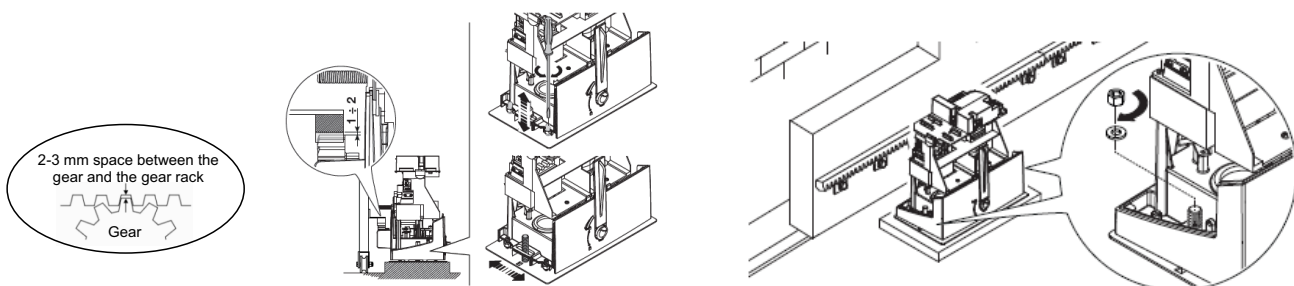
Install all the gear rack pieces one by one onto the gate using the motors pinion as the base height setting.

Each piece of gear rack clips into the next.

## Step 6: Final Fixing

Adjust the motor down using the threaded height adjuster. The gear rack should have a 1-2mm gap to the pinion and the gate should very easily slide by hand.

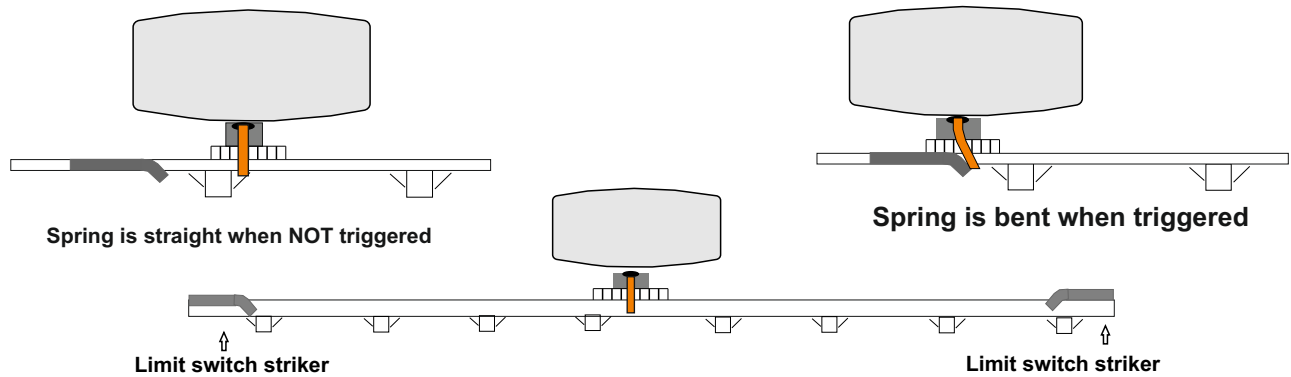
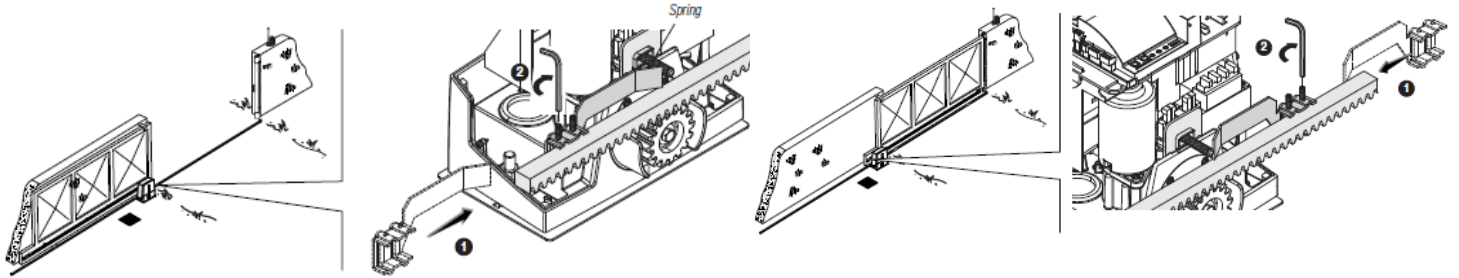
Slide the motor forward/back to ensure full engagement to the gear rack then tighten the motor down using the washer and M12 nut.



## Step 7: Striker Plates

Open the gate by hand (Don't let it touch the gate stop) and install the striker plate on the gear rack til it toggles the spring switch system.

Close the gate by hand (Don't let it touch the post or the gate stop) and install the striker plate on the gear rack til it toggles the spring switch system.

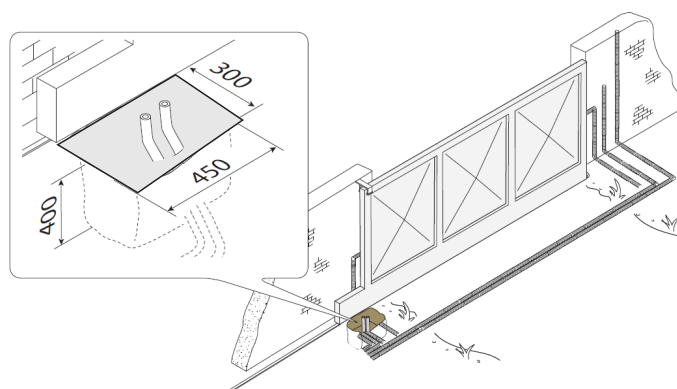


## Installation after the pouring stage

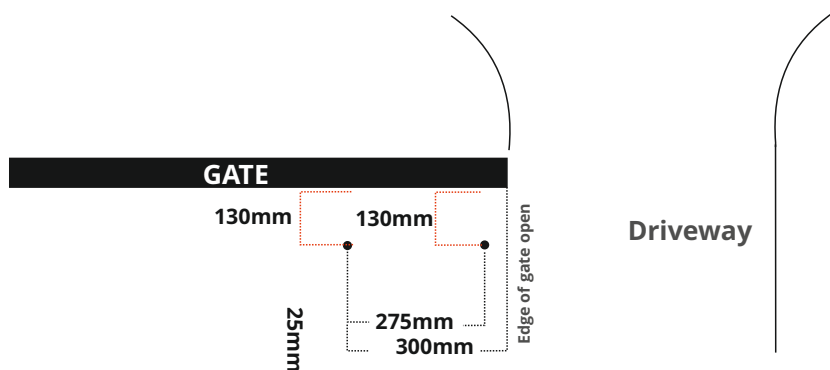
### Step 1: Option 2 (Install motor on existing concrete by masonry anchor)

Pour a concrete pad as per the illustration.

Set up the conduits needed for the wiring required for the installation including any accessories.

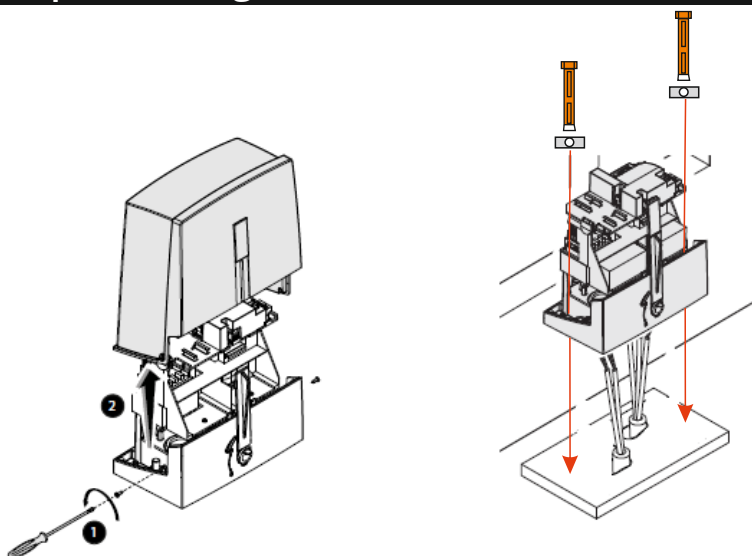


### Step 2: Drilling for the mounting



Drill TWO 10mm hole into the concrete according to the measurements above, these holes will be used for bolting the motor to the concrete pad using the masonry fixing.

### Step 3: Placing the motor

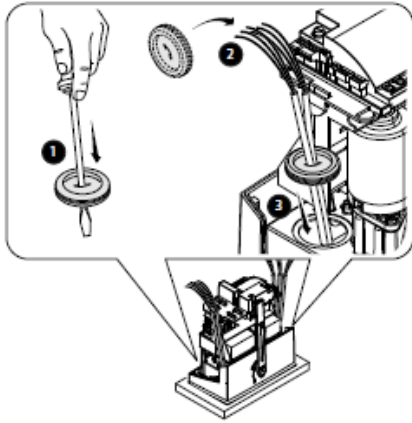


Remove the cover screws (one on each side).

Sit the motor in place whilst feeding the cables through the holes in the casing.

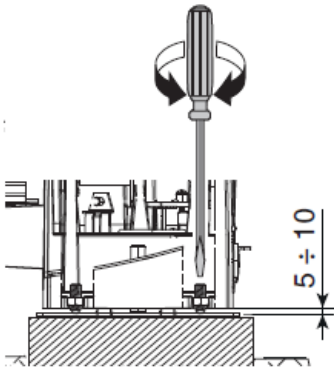
Using the rectangular washers supplied push the Dynabolts through the washers then through the holes in the casing and down into the holes drilled in the previous step (do not tighten yet).

## Step 4: Cable pull through

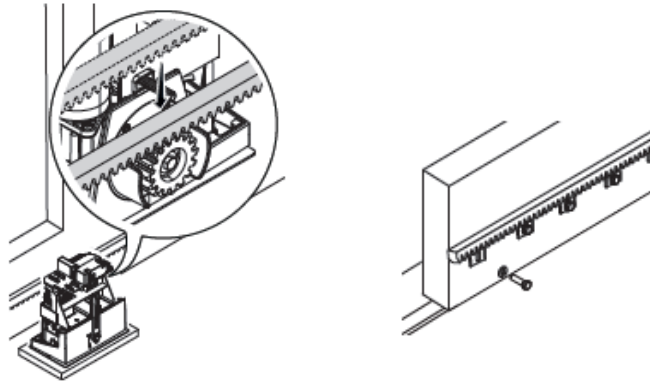


Cut the gland and thread the cable through then insert it into the bottom of the case.

## Step 5: Gear rack installation



Screw out all FOUR threaded height adjusters by 5mm to 10mm raising the motor off the concrete base.



Unlock the gate motor

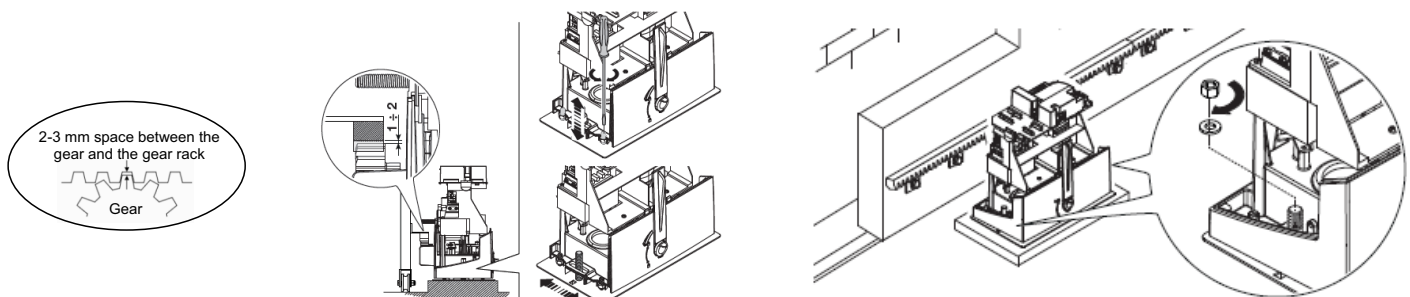
Install all the gear rack pieces one by one onto the gate using the motor's pinion as the base height setting.

Each piece of gear rack clips into the next.

## Step 6: Final Fixing

Adjust the motor down using the threaded height adjuster. The gear rack should have a 2-3mm gap to the pinion and the gate should very easily slide by hand.

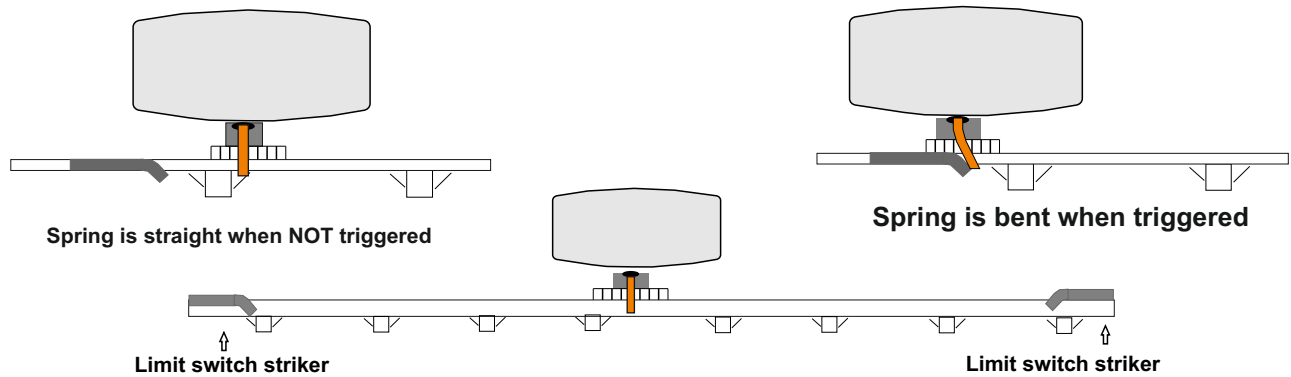
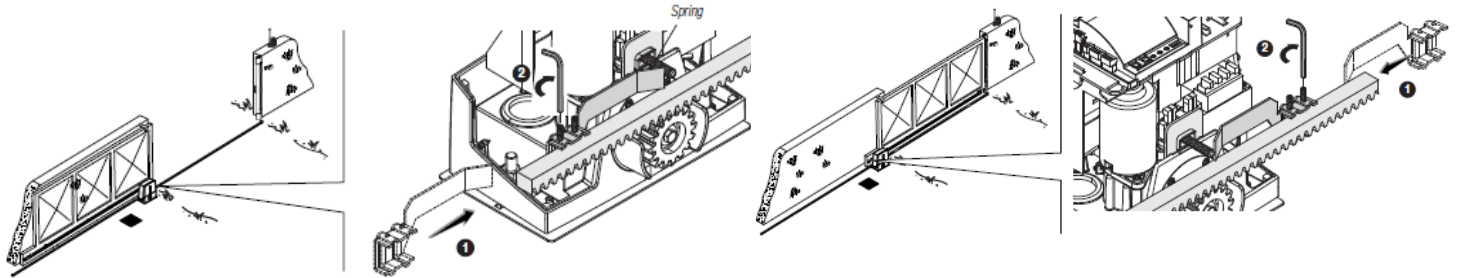
Slide the motor forward/back to ensure full engagement to the gear rack then tighten the dynabolts to secure the motor.



## Step 7: Striker Plates

Open the gate by hand (Don't let it touch the gate stop) and install the striker plate on the gear rack til it toggles the spring switch system.

Close the gate by hand (Don't let it touch the post or the gate stop) and install the striker plate on the gear rack til it toggles the spring switch system.

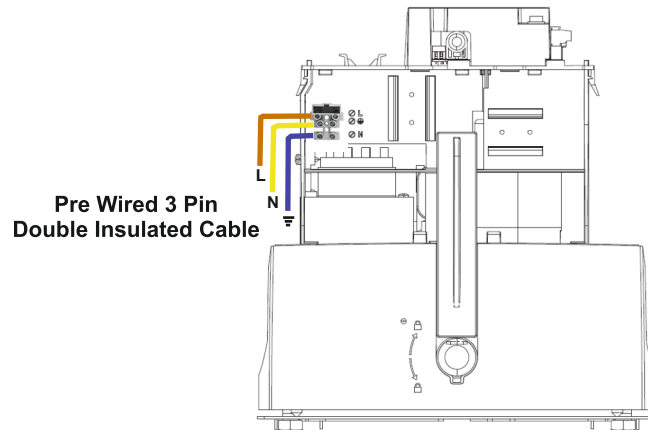


## Internal Transformer, wiring and Fuse

 **HIGH VOLTAGE**



ANY and ALL HIGH VOLTAGE Electrical modifications must be carried out by a qualified electrician

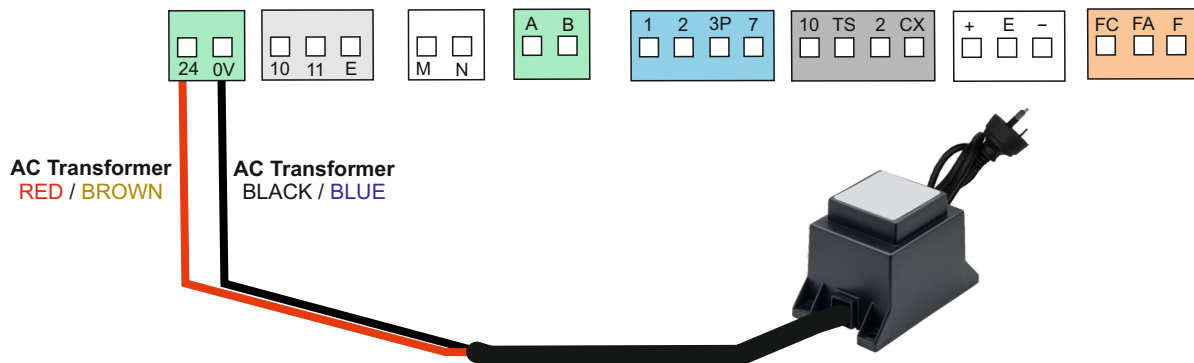


## APC External AC Transformer (Low Voltage Systems)



Ensure the transformer is not powered on before proceeding with any low voltage connections

The diagram below will illustrate the low voltage transformer connection to the bridge rectifier located UNDERNEATH the control board. The transformer should never be connected directly to the control board and must always be wired to the bridge, any other method of connection will result in immediate damage to the system.



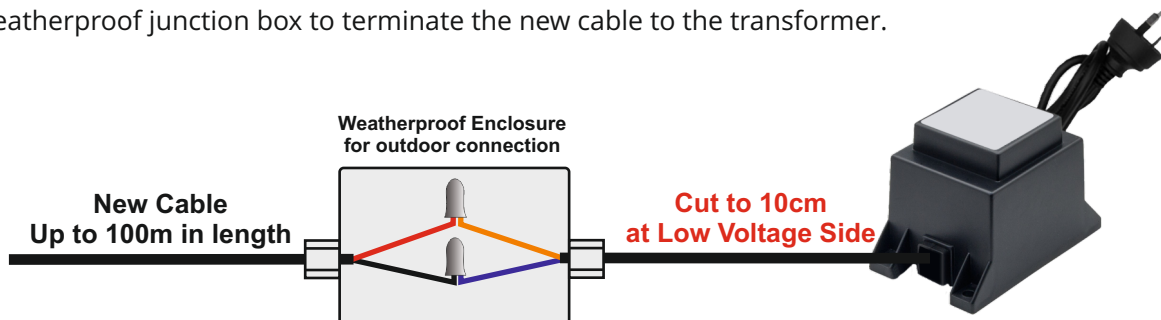
## Extending the APC External AC Transformer (low Voltage)



Ensure the transformer is not powered on before proceeding with any low voltage connections

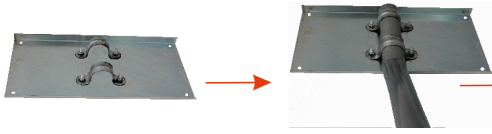
Maximum cable distance: The low voltage transformer can be run up to 100m in cable distance when using a 2mm pair conductor or greater. To run the transformer to maximum capacity the cable must be cut at the LOW VOLTAGE SIDE within 10cm from the output.

**Note:** Use a weatherproof junction box to terminate the new cable to the transformer.



# Solar Panel Assembly and Placement

LOOSLEY assemble the two clamps to the base plate.



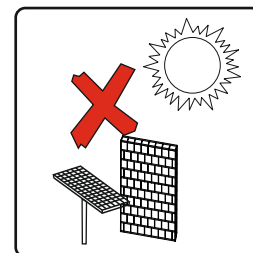
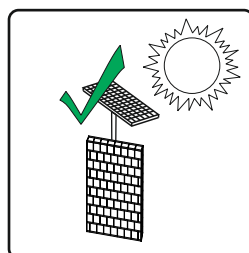
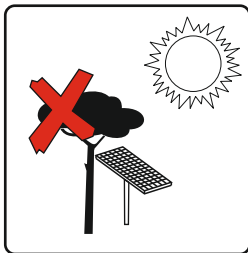
Insert the post into the clamps and tighten. USE the rubber cutouts around the post for best grip

Assemble the base plate to the solar panel using the supplied bolts

1. The solar panel should be installed at 45° facing mid-day to afternoon sun.
2. Assemble and install the solar panel in a place that is exposed to the sun most of the day and as far as possible from any walls or trees.
3. Make sure that the two wires of the solar panel do not touch each other at any time during installation.
4. Install the solar panel at least 2m above the ground to protect it from dust and small stones.

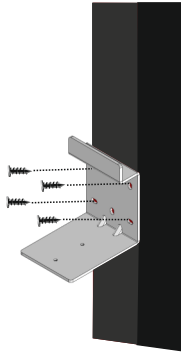
## Understanding Solar

1. A solar panel CANNOT be installed under a tree, it requires sun to charge and maintain the batteries.
2. A solar system is often maintenance free BUT the batteries may require an occasional external charge in the winter months due to lack of sun.
3. Constantly powered accessories such as wired keypads will increase the standby current draw, solar panel or battery upgrades may be required if insufficient sun collection is not achieved.

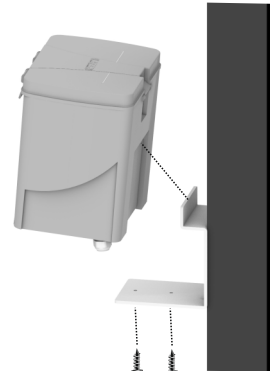


## Mounting the Solar Box

1. Install the bracket to the wall or post using the appropriate fixings whilst adhering to the maximum cable distance of 10m (note that the system is supplied with 6m).



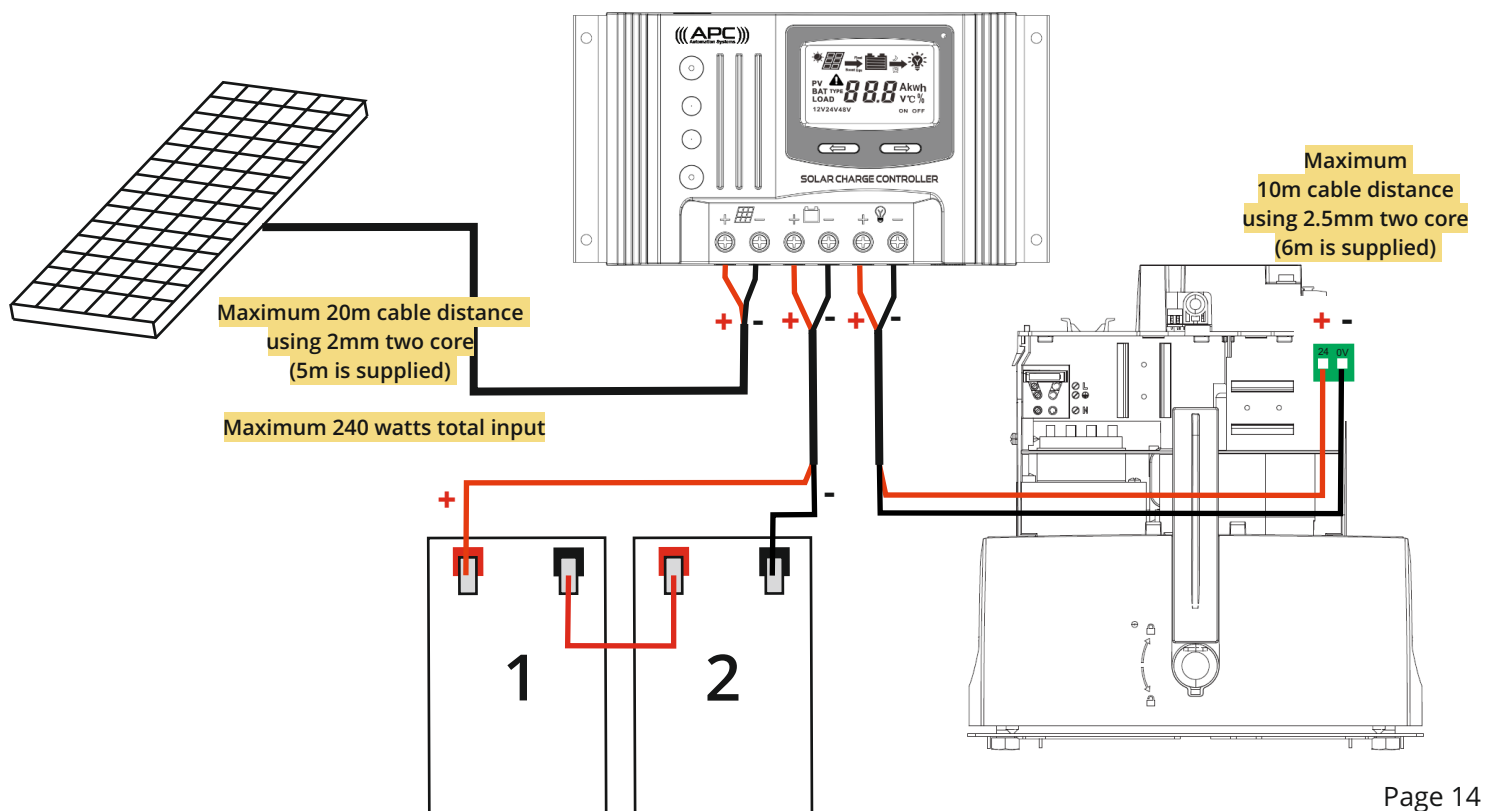
2. Position the solar box onto the installed bracket and secure in place using the two 4mm allen screws at the bottom.



## Wiring the Solar System

Taking into account that the solar panels maximum cable distance is 20 metres and the maximum distance between the solar box and the gate controller is 10 metres find a suitable location for the mounting of the box accordingly. Both the solar box and the solar panel are completely weatherproof and can be mounted in complete exposure to the elements.

1. Wire the positive and negative of the solar panel to their corresponding terminals.
2. Wire the batteries in series to create a 24V arrangement into the system and wire into the corresponding terminals. Regulator positive direct to battery 1, Regulator negative direct to battery 2, link the remaining terminal of each battery together.
3. Wire the regulators load outputs to the control boards green 24V input connector.
4. Plug the 24V power feed connector into the control board once ALL wiring works are completed.





# Wireless Equipment Pairing

## Full Gate Operation

1. Press P1 **ONE TIME** and wait for the **single flash** from the LED
2. Now press the button on the transmitter you wish to use for this function or type in the code on the wireless keypad followed by #.

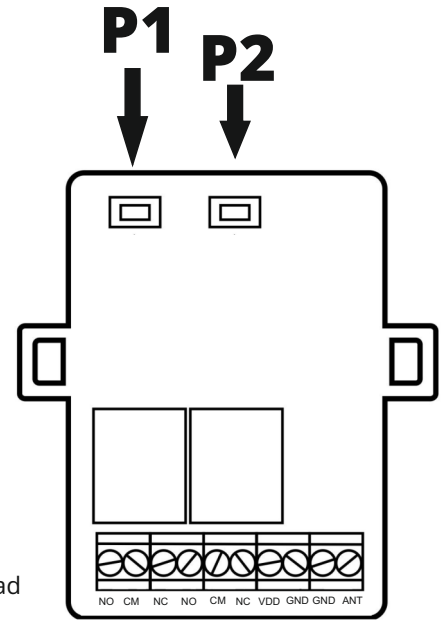
## Pedestrian Operation

1. Press P1 **TWO TIMES** and wait for the **two flashes** from the LED
2. Now press the button on the transmitter you wish to use for this function or type in the code on the wireless keypad followed by #

# Wireless Equipment Deleting

## Deleting ONE specific item

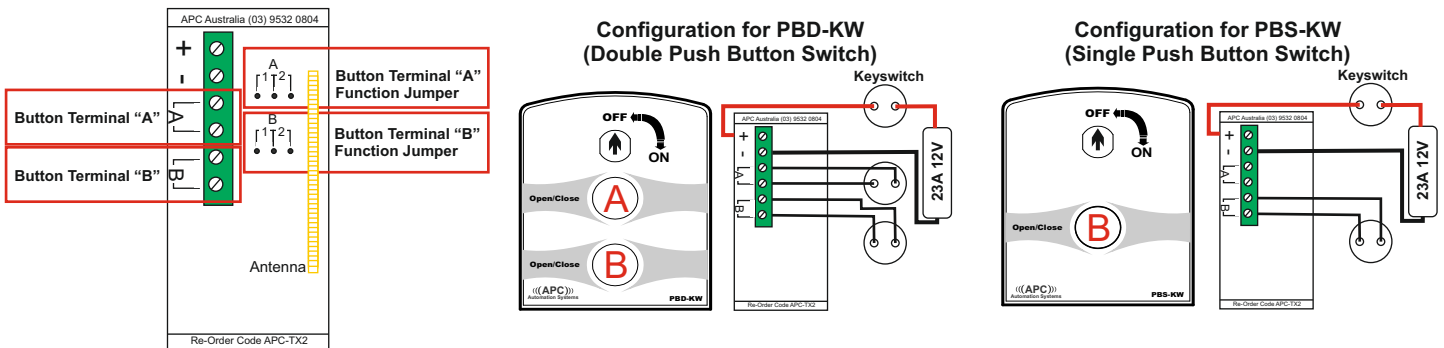
1. Press and HOLD P2 for 3 Seconds.
2. Upon releasing P2 the LED will turn on
3. Press the transmitter button you wish to delete or type in the code on the wireless keypad
4. If followed correctly the led should flash TWICE for confirmation.



## Deleting ALL items

1. Press and HOLD P2 for 10 Seconds, the LED should turn ON.
2. Press the transmitter button you wish to delete
3. If followed correctly the led should flash TWICE for confirmation.

# APC Smart Wireless Button Configuration



When the jumper is set to "1" and center pin the designated output will operate double gates.  $\uparrow \uparrow \downarrow$  FULL Gate Setting

When the jumper is set to "2" and center pin the designated output will operate a single gate.  $\uparrow \downarrow$  PEDESTRIAN Gate Setting

# APC-KP2W Pin number programming (4 Digit)

The APC-KP2W has TWO channels, each channel can control a different function on an APC Smart control board. To continue adding pin numbers after adding the first repeat the steps bellow.

**Note:** When you add your first pin number to each channel the default pin code will automatically be erased.

## -Channel 1 Full Gate Operation (Supports 8 Pin Codes)

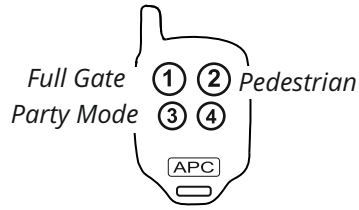
Master Code  \*  
 0 1 | #  
 Pin Code | #

## -Channel 2 Pedestrian Gate Operation (Supports 3 Pin Codes)

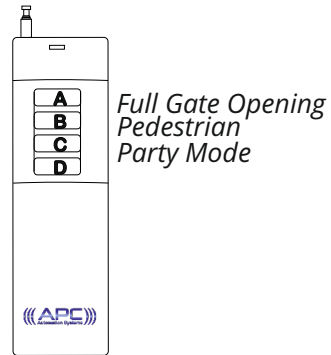
Master Code  \*  
 0 2 | #  
 Pin Code | #

# Using your Wireless Equipment

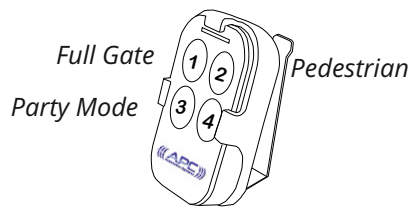
- \* All guideline distances will vary from site to site
- \* All operating ranges are based on a clear environment (interference free)
- \* Metal fences will drastically decrease operating ranges
- \* All operating ranges can be boosted with the ANT-1 Antenna



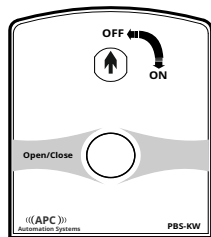
**APC-RC4S**  
15 Metre Operational Range\*



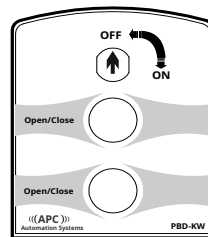
**APC-RC450S**  
400+ Metres  
Operational Range\*



**APC-RC4SV**  
20 Metre Operational Range\*

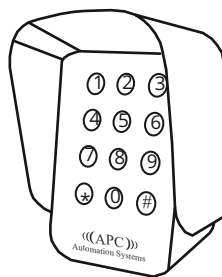


**PBS-KW**



**PBD-KW**

5 Metre Operational Range\*



**APC-KP2W**  
20 Metre Operational Range\*

Type in the 4 digit pin code then press #

Default:  
1111# For Full Gate Opening  
2222# For Pedestrian Opening

## Basic Settings

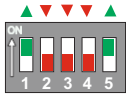
### Automatic Close

*by default the feature is disabled*

Whilst the DIP Switches are set press P1.

One Buzzes= Automatic Close Enabled

Two Buzzes= Automatic Close Disabled



Note: The adjustment for time is set by the ACT trimmer.

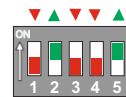
### Automatic Close after partial stop

*by default the feature is enabled*

Whilst the DIP Switches are set press P1.

One Buzzes= Automatic Close after Partial Stop Disabled

Two Buzzes= Automatic Close after Partial Stop Enabled



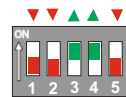
### Open/Close (Invert Direction) or OPEN/STOP/CLOSE

*by default the feature is set to invert direction*

Whilst the DIP Switches are set press P1.

One Buzzes= Open/Stop/Close

Two Buzzes= Invert Direction



Note: This will affect all wired and wireless features

## Adjustments

Automatic  
Close Time

120  
Second



1  
Second

Slow Speed  
Adjustment

60%



30%

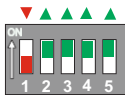
Sensitivity  
Adjustment

Most  
Sensitive



Least  
Sensitive

### Updating the Trimmer Values



Whilst the DIP Switches are set press P1. The LEDs will illuminate and the buzzer will sound for one second.

Note: This feature is to update the Automatic Close Time, Slowdown Speed and Sensitivity, it is required after any adjustments are made.

## Safety Configurations

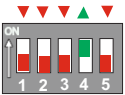
### Photocell Input (Terminals CX & 2)

*by default the feature is disabled*

Whilst the DIP Switches are set press P1.

One Buzzes= Photocell Input Enabled

Two Buzzes= Photocell Input Disabled



Note: When enabled it will prevent the gate from closing if there is a fault with the sensor or misalignment

### Re-Open during Closing or Pause

*by default the feature is set to Re-Open*

Whilst the DIP Switches are set press P1.

One Buzzes= Pause

Two Buzzes= Re-Open



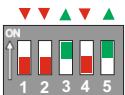
### Pre-Flashing Time

*by default the feature is Disabled*

Whilst the DIP Switches are set press P1.

One Buzzes= Enable Pre-Flashing

Two Buzzes= Disable Pre-Flashing



Note: Enabling this feature will operate the light output for 5's prior to the gate movement in either the open or close direction.

## Safety Configurations cont.

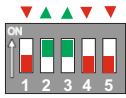
### Total Stop Feature Input (Terminals 1 & 2)

*by default the feature is enabled*

Whilst the DIP Switches are set press P1.

One Buzzes= Total Stop Input Enabled

Two Buzzes= Total Stop Input Disabled



Note: When enabled it will prevent the gate from operating if there is a fault with the connection or the button is in an open state.

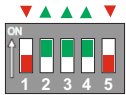
### Obstruction Detection with motor Stopped

*by default the feature is disabled*

Whilst the DIP Switches are set press P1.

One Buzzes= Stopped Obstruction Detection Enabled

Two Buzzes= Stopped Obstruction Detection Disabled



Note: When enabled it will prevent the gate from operating if there is a fault with the connection or sensor whilst closed, open or stationary.

## Advanced

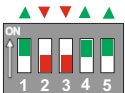
### Ultra Slow Mode

*by default the feature is Disabled*

Whilst the DIP Switches are set press P1.

One Buzzes= Enable Ultra Slow

Two Buzzes= Disable Ultra Slow



Note: This would only be used in a situation where the gate needs to run at 40% of the normal operating speed such as a pedestrian passage gate.

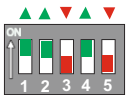
### Dead Man Mode

*by default the feature is Disabled*

Whilst the DIP Switches are set press P1.

One Buzzes= Enable Dead Man Mode

Two Buzzes= Disables Dead Man Mode



Note: Any devices connected across the pedestrian function input will open the gate any devices connected across the full gate operation input will close the gate. To operate the operating device must maintain a operational status for the cycle, example th you must keep the button pressed for the gate to move.

### Service Test

*by default the feature is disabled*

Whilst the DIP Switches are set press P1.

One Buzzes= Enables Service test

Two Buzzes= Disables Service Test



Note: When enabled it will test the service operation of the photocell from the terminal TS to ensure good operation.

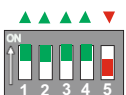
### Encoder

*by default the feature is Enabled*

Whilst the DIP Switches are set press P1.

One Buzzes= Enable Encodes

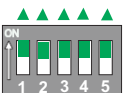
Two Buzzes= Disables Encoder



Note: The encoder should not be disabled for any reason other than fault diagnostics.

### Complete Parameter Reset

Whilst the DIP Switches are set press P1. The LED's will blink and the buzzer will sound twice then settings are reset.



## Gate System Learning Cycles

Before beginning this step you must first ensure that all your motor wiring connections are connected correctly, there are no loose wire strands and all connection points are joined and insulated correctly

The purpose of the learning cycles is so that the gate control panel can learn its opening and closing limits and learn its slowdown. If the control panel is not setup it may run inconsistently and/or may not reach its stopping points and/or slow down incorrectly..

**Check your limit positions**

## Preliminary checks prior to learning cycles

Ensure gear rack is not binding with **ZERO** resistance

Ensure gate is free of **ALL** bowing

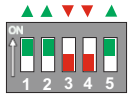
Ensure that the motor is firmly fixed

Ensure that the connections are all correct with no loose wire strands

Ensure that limits are set correctly

Ensure that the motor direction is set correctly

## Setting the Operating Direction



by default left is the opening direction.

Whilst the DIP Switches are set press P1.

One Buzzes= Right Opening Configuration

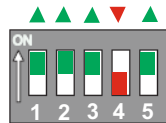
Two Buzzes= Left Opening Configuration

## Gate Learning Cycle

- 1** Open the gate completely using the manual override then re-engage the motor.



- 2** Set the DIP switches for the learning cycle then press the P1 button



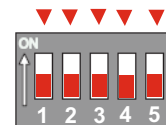
- 3** The gate will perform a closing cycle



- 4** The gate will perform an opening cycle



- 5** Once complete return all DIP switches to OFF

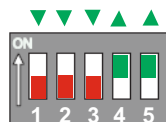


## Pedestrian Learning Cycle

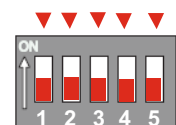
- 1** Open the gate to the desired pedestrian open position using the remote. You can stop the gate at the position by pressing the remote button again



- 2** Set the DIP switches for the pedestrian learning cycle then press the P1 button



- 3** Once complete return all DIP switches to OFF

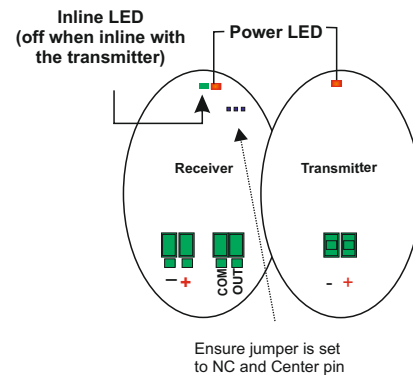
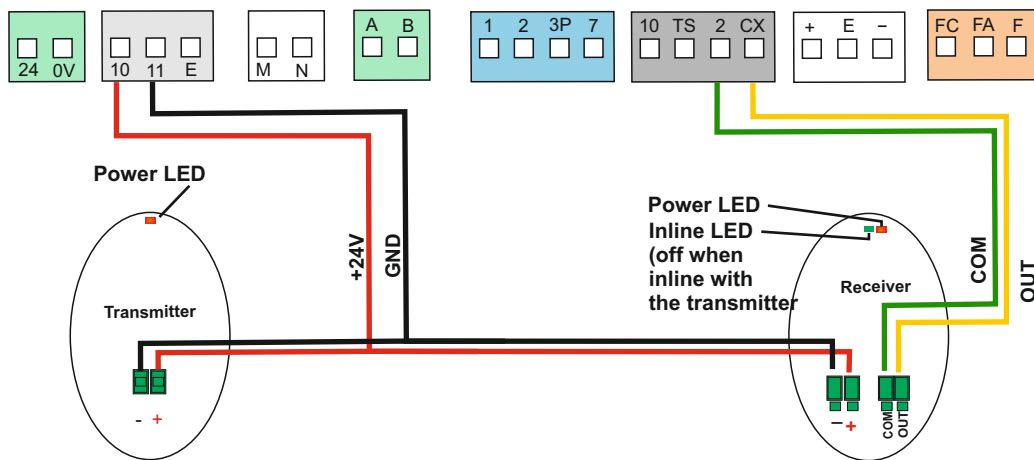


## Connecting a Single PE Sensor (APC-PE-2000)

APC-PE-2000 PE sensor (Transmitter & Receiver) **must be connected back to the control panel.**

Install the PE-2000 Photoelectric sensor on the first entry point of the driveway from post to post at approx. 500mm above ground level.

The Transmitter and the Receiver must be inline with each other  
(The inline LED will be off when aligned with the transmitter).

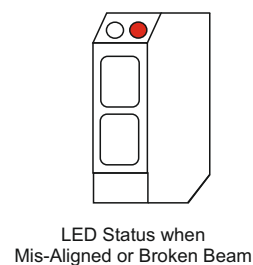
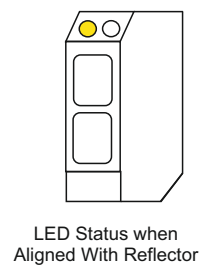
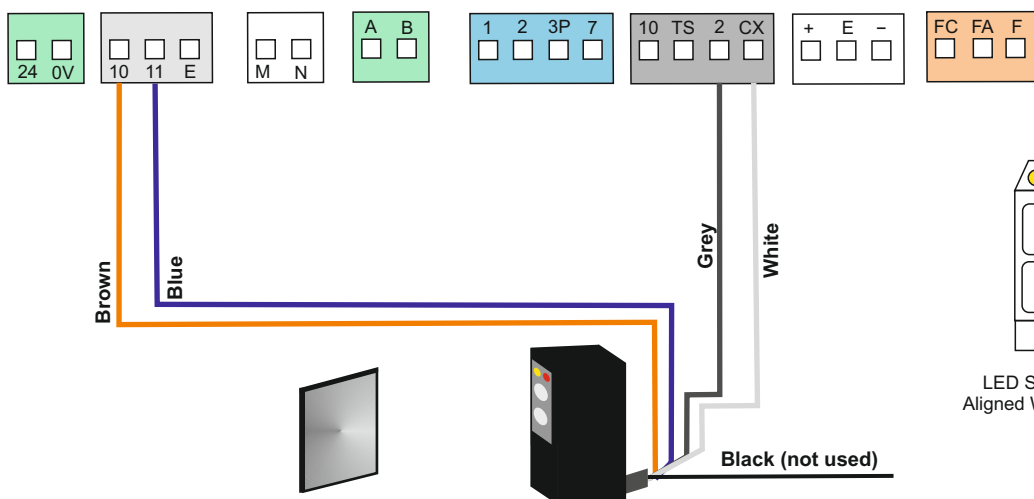


## Connecting a Single Retro Reflective Sensor (APC-RR-11)

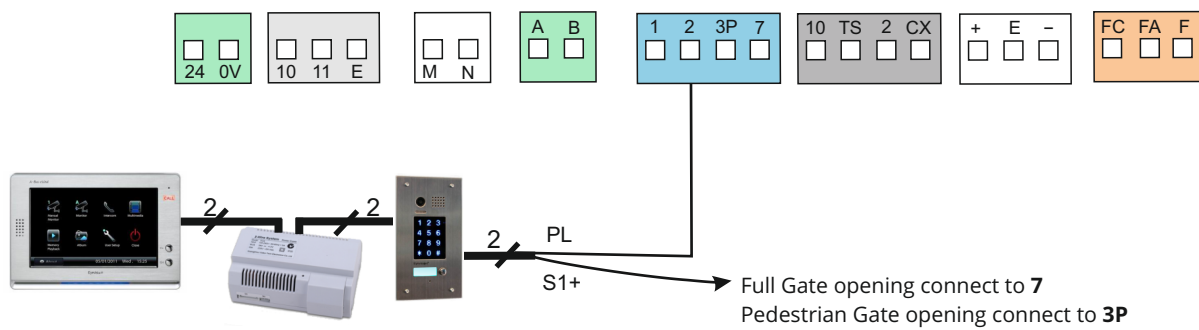
APC-RR-11 Reflective sensor (Transmitter only) **must be connected back to the control panel** (see wiring diagram).

Install the RR-11 Reflective sensor on the first entry point of the driveway from post to post at approx. 500mm above ground level.

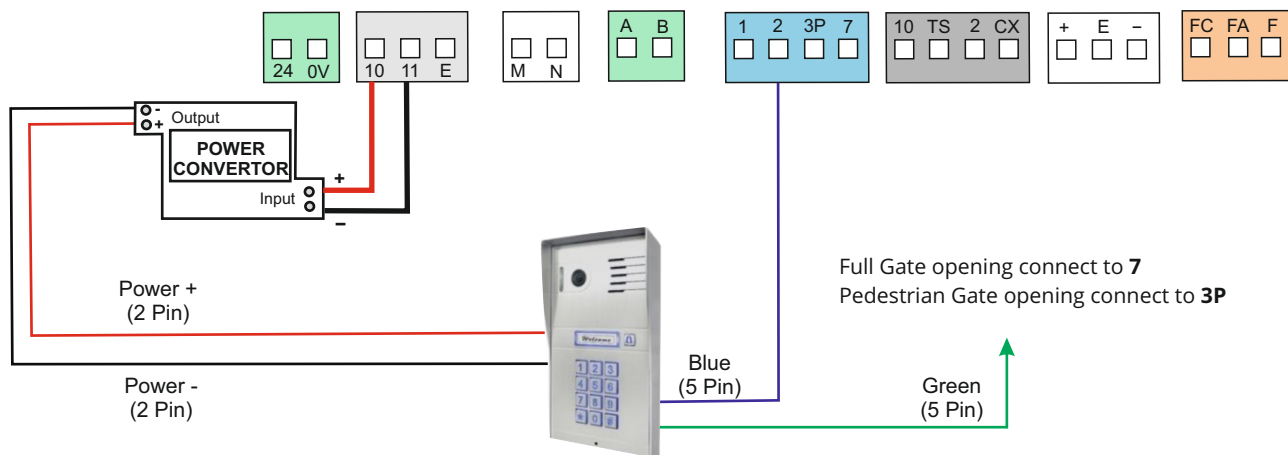
The Transmitter and the Reflector must be inline with each other  
(The yellow inline LED will be ON when Aligned with the transmitter).



## Eyevision® 2 Wire Intercom System Connection

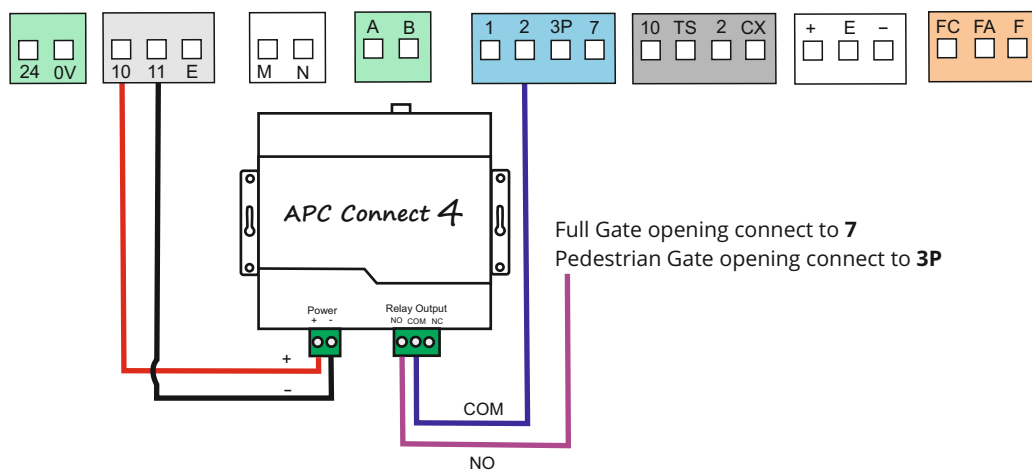


## Eyevision® 4 Wire HYBRID Intercom and WIFI intercom System Connection



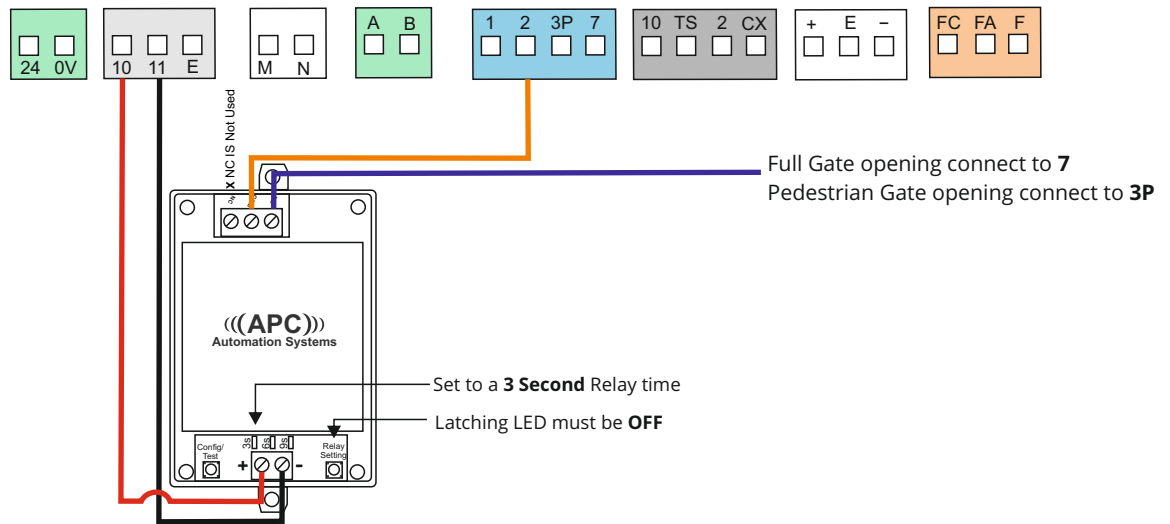
## APC Connect 4 GSM Receiver

A GSM Receiver is the absolute most flexible form of access control. Providing there is good mobile reception at the gate the GSM switch can operate the gate from anywhere in the world. When receiving a call it will automatically reject the call and open or close the gate. SIM CARD IS NOT SUPPLIED.



## Connecting an APC WiFi Switch (APC-WF-CH1)

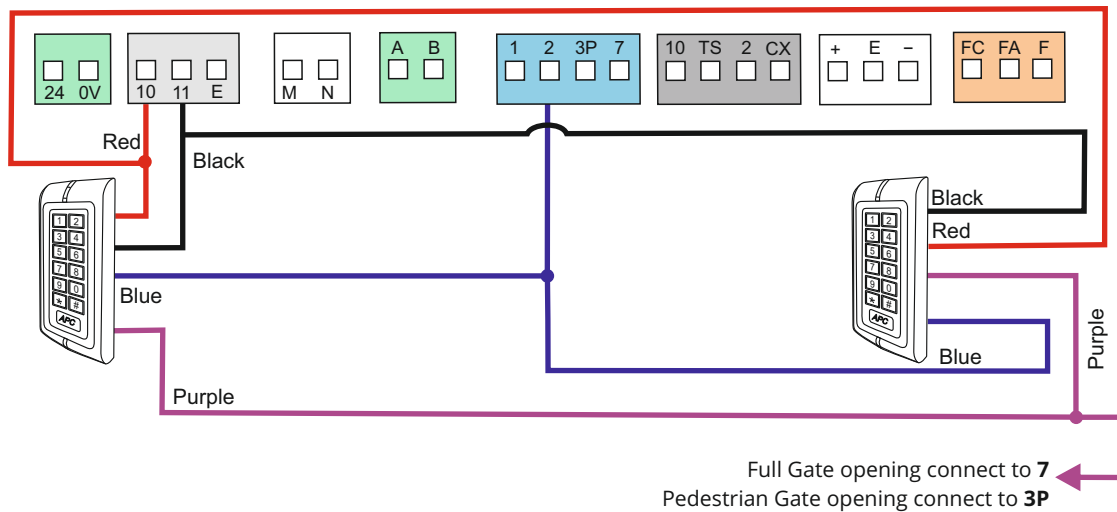
A WiFi Switch is a simple APP based control system that can be used from anywhere in the world by numerous users providing there is good WiFi reception at the gate system itself.



## Connecting an APC Keypad (APC-KP1-C)

Unlike a push button entry switch using a keypad can provide a much higher security for access control for guests, workers, tenants etc.

Using a keypad will allow you to manage the users by adding and deleting as required. Its backlit illumination also allows for ease of use at night.



## Quick Programming Pin Code

- \*8888888# Master Code used to enter programming only
- 1 To enter Pin code programming
- User ID # Any number between 1-999, this number is unique to each pin code/swipe tag and cannot be used twice
- Pin Code# The Pin code you would like to use to open the gate (4-6 Digits)
- \*
- \*

## Quick Programming Swipe Tag

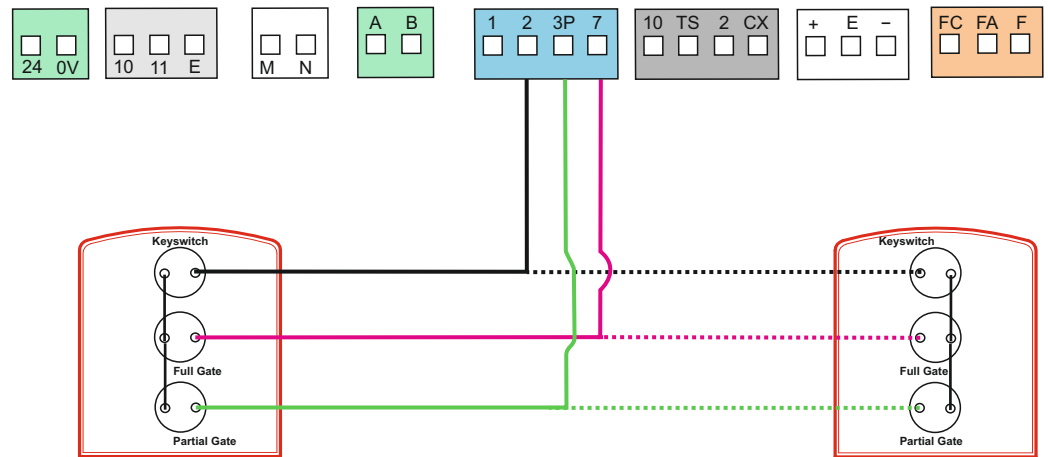
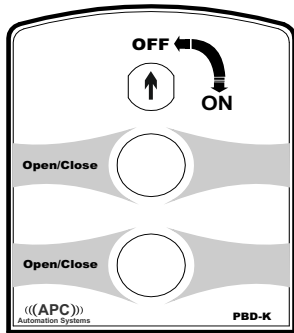
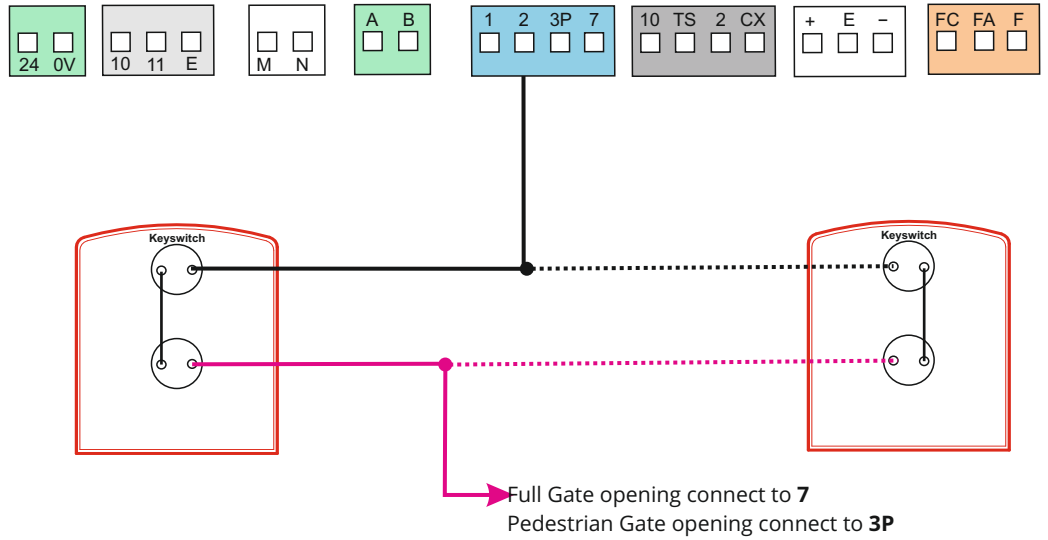
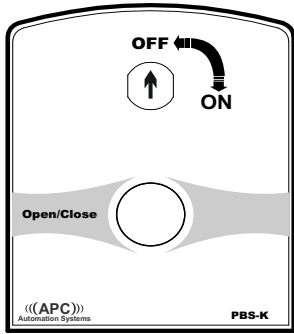
- \*8888888# Master Code used to enter programming only
- 1 To enter Pin code programming
- User ID # Any number between 1-999, this number is unique to each pin code/swipe tag and cannot be used twice
- SWIPE # Swipe the tag past the black APC window
- \*
- \*



# APC Wired Push Button Connection

Push buttons are used for opening and closing the gates without using a remote.

Push buttons can be used for a vast amount of purposes ranging from basic access control for visitors, workers or taking out the bins.

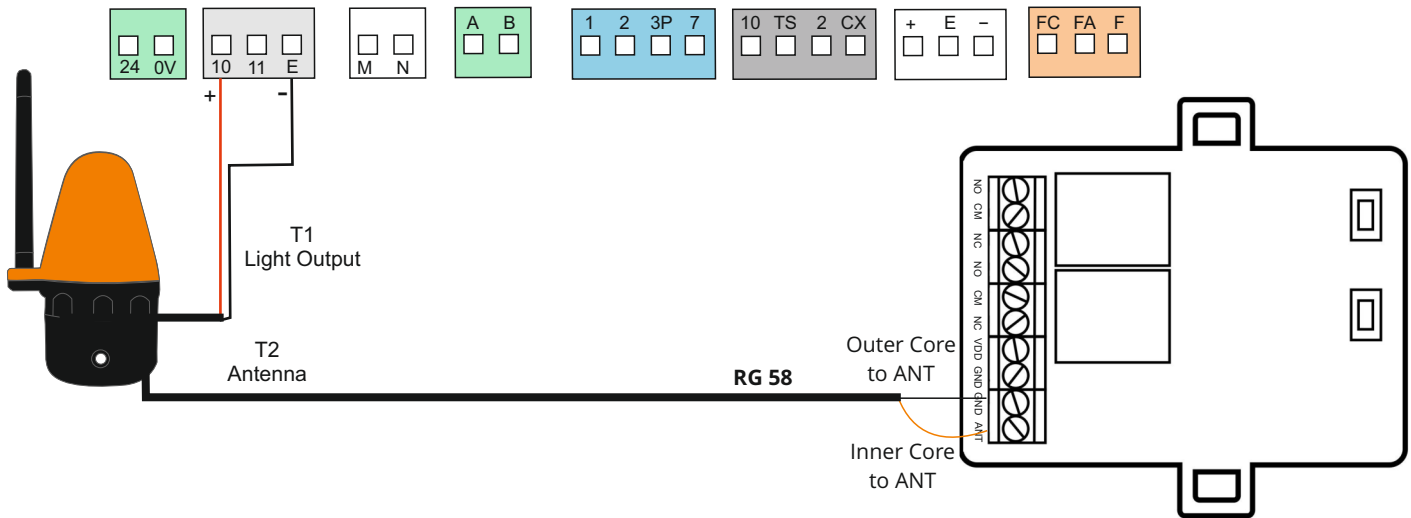


## APC Courtesy Light Output

Courtesy Lights are used to alert pedestrians to be cautious as there may be vehicles entering and exiting.

The internal relay will support an output of 24V 25W Maximum.

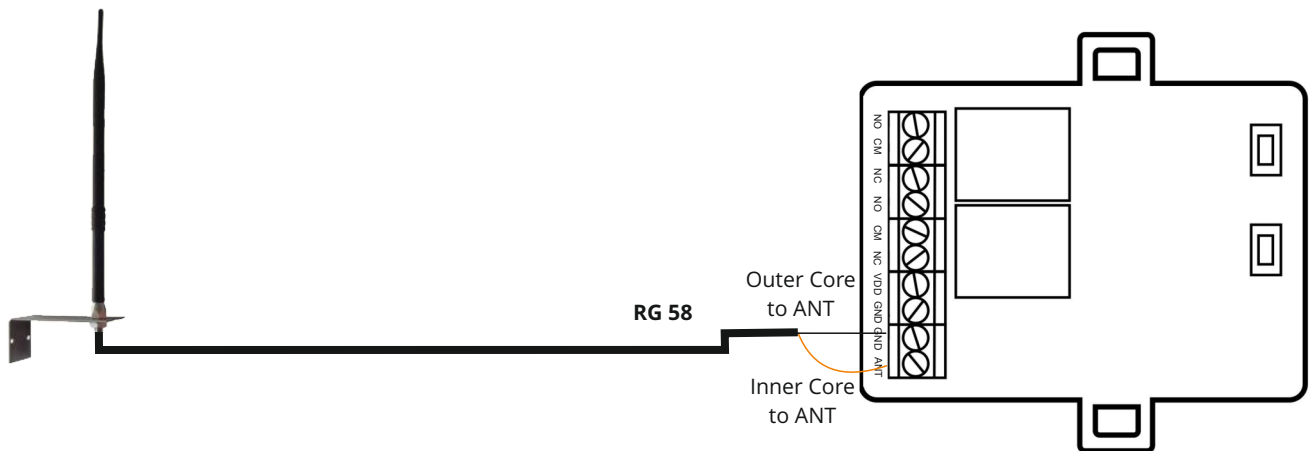
**⚠ THIS OUTPUT IS NOT USED TO CONNECT DRIVEWAY LIGHTS**



## Connecting an APC-ANT1 External Antenna

The ANT-1 external antenna can boost the remote range drastically in most installations.

Suitable for Residential, commercial and rural installations this antenna used in conjunction with the **APC-RC450S** remote can boost functionality **UP TO 800m** distance. When used in conjunction with **APC-RC4S** it can boost functionality **UP TO 80m** distance.



## Compatible Equipment

The equipment listed below does not affect the warranty of the control panel and have been tested and approved for use. Limited warranty is applied to the control panel when used with third party equipment.

### Sensors

- APC-PE2000
- APC-RR-11
- APC-LD1-24V

### Receivers

- APC-Connect 4
- APC-RCR2
- APC-WF-CH1

### Remotes

- APC-RC4S
- APC-RC4SV
- APC-RC450S

### Internal Transformer

- PS-24INT

### External Transformers

- PS-24EXT

### Solar Panels

- APC-SP24-20W
- APC-SP24-40W
- APC-SP24-60W

### Keypads

- APC-KP1-C
- APC-KP2W

### Push Buttons

- APC-PBS (K/KW)
- APC-PBD (K/KW)

### Courtesy Light

- APC-LAMP24

## Warranty Terms

### APC WARRANTY

APC Automation Systems warrants the original purchasers or the APC gate(s) opening system for a period of twelve months from the date of purchase (not installation), the product shall be free of defects in materials and workmanship under normal use.

During the warranty period, APC shall, as its option, repair or replace any defective product upon return of the product to its factory, at no charge for labour and materials.

Any replacement and/or repaired parts are warranted for the remainder of the original warranty, The original owner must promptly notify APC in writing that there is defect in material or workmanship, such written notice must be received in all events prior to expiration of the warranty.

### International Warranty

APC shall not be responsible for any freight fees, taxes or customs fees.

### Warranty Procedure

To obtain service under this warranty, AND AFTER CONTACTING APC, please return the item(s) in question to the point of purchase.

All authorized distributors and dealers have a warranty program, anyone returning goods to APC must first obtain an authorization number.

APC will not accept any shipment for which prior authorization has not been used.

### Conditions to Void Warranty

This warranty applies only to defects in repairs and workmanship relating to normal use. It does not cover:

- Damage incurred in shipping or handling
- Damage caused by disaster such as fire, flood, wind, earthquake or lightning
- Damage due to causes beyond the control of APC such as excessive voltage, mechanical shock or water damage
- Damage caused by unauthorized attachment, alterations, modifications, or foreign objects.
- Damage caused by peripherals (unless such peripherals were supplied by APC)
- Defects caused by failure to provide a suitable installation environment for the products
- Damage caused by usage of the products for purpose other than those for which it was designed.
- Damage from improper maintenance
- Damage arising out of any other abuse, mishandling, and improper application of the products.

Under no circumstances shall APC be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, loss of profits, loss of the product or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property.

### Disclaimer of Warranties

This warranty contains the entire warranty and shall be in lieu of any and all other warranties, whether expressed or implied (including all implied warranties of merchantability or fitness for a particular purpose). And of all other obligations or purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

### Out of Warranty Repairs

APC will at its option repair or replace out-of-warranty products which are returned to its factory according to the following conditions.

Anyone returning goods to APC must first obtain an authorization number.

APC will not accept any shipment whatsoever for which prior authorization has not been obtained.

Products which APC determines to be repairable will be repaired and returned. A set fee which APC has been predetermined and which may be revised from time to time will be charged for each unit repaired. Products which APC determines not repairable will be replaced by the nearest equivalent product available at that time. The current market price for the replacement product will be charged for each replacement unit.