

**Wiring Guide to**

**SOLAR & ELECTRIC**

**SINGLE GATE  
OPENER**

**FAILURE TO FOLLOW THESE INSTRUCTIONS MAY  
VOID YOUR WARRANTY**



**Automatic  
Gate System**

# Contents

## WIRING GUIDE TO ELECTRIC & SOLAR SINGLE GATE OPENER

### CONTENTS

#### SOLAR SYSTEM

Step 1 mounting control box .....	3
Step 2 prepare regulator on L bracket .....	3
Step 3 connect motor wire .....	4
Step 4 mount L bracket .....	4
Step 5 mount regulator .....	5
Step 6 connect receiver .....	5
connect push button .....	6
Step 7 placement of receiver .....	7
Step 8 connection from battery to regulator .....	7
Step 9 secure battery .....	8
Step 10 power up the control board .....	8
Step 11 connect solar cable to regulator .....	9
Pointers, Auto Close & Securing control box lid.....	10

#### ELECTRIC SYSTEM

Step 1 mounting control box .....	11
Step 2 connect motor wire .....	12
Step 3 mount L brackets .....	12
Step 4 connect receiver .....	13
Step 5 placement of receiver .....	13
connect push button .....	14
Step 6 secure battery .....	15
Step 7 power up the control board .....	15
Step 8 connect transformer to board .....	16
Pointers, Auto Close & Securing control box lid.....	17
Long range receiver wiring .....	18
Keyed push button wiring .....	18

# Single Solar Wiring

## Solar Gate Opener Wiring



### Step 1

#### Mounting the control box

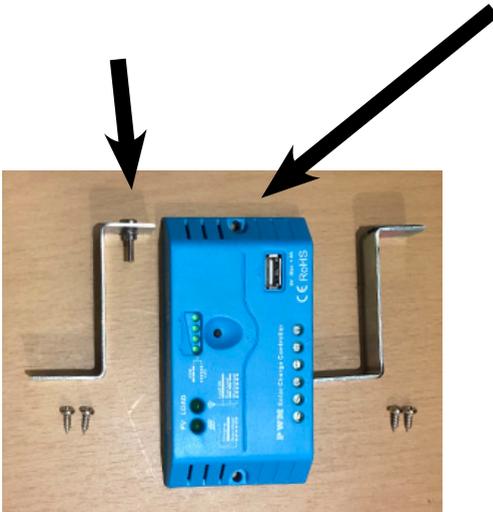
Install the control box at a suitable location. Use the pre-marked anchor points in the box.

**Do not drill holes above the computer board as this will allow water in and damage the board.**

### Step 2

#### Prepare Regulator on L Bracket

Prepare the regulator by mounting the L-Bracket at the screw hole located next to the usb port with the bolt and nut provided.



Regulator



# Single Solar Wiring



## Gate Direction

Red and Blue = pull to open  
Blue and Red = push to open



## Step 4

### Mount L Bracket

Mount the L-Bracket onto the ledge in the control panel box as shown



## Step 3

### Connect Motor Wires

Connect the Motor cables to MTA on the D1 board

**Note:** In the conduit, you should also have the 1 wire to the solar panel ready. If hardwired pushbutton is to be connected, this wire should also be available

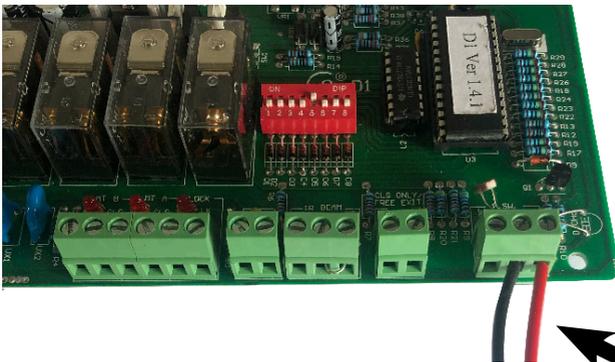




# Single Solar Wiring



**Please note: speaker cable not supplied in kit**



## Push Button Installation

To secure the push button, screw to a post.  
Silicon any holes including screw holes as well as around the back of the push button where it attaches to the post.  
This will prevent water and insects getting inside the push button.

Using fine speaker wire, connect to the 2 ports inside the push button (1 strand in each port), then at the other end connect 1 strand into the D1 board [1 side] and the other strand into the [COM]. Make sure you have a good connection.

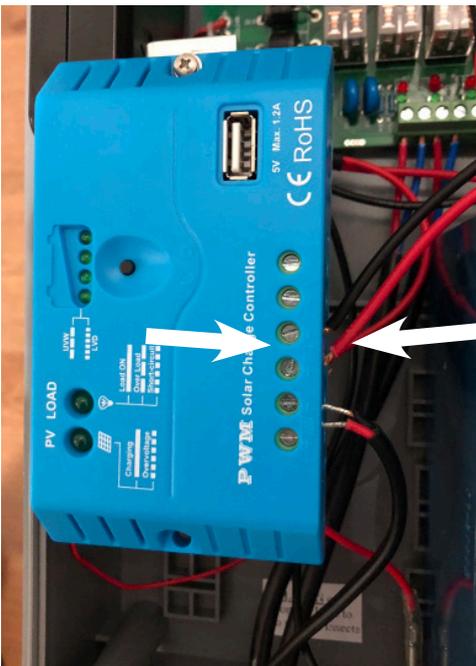
# Single Solar Wiring



## Step 7

### Place Receiver at the side

Place the receiver to the left of the control panel, slide behind the regulator until it is held in place.



## Step 8

### Connect the cable to the battery terminal of the regulator

Connect the red and black cable from the D1 board to the regulator on the battery terminal. Making sure red is to + and black is to -

**Do NOT** connect the cable from the solar panel yet

# Single Solar Wiring



## Step 9

### Secure the 12 volt battery

Place the battery in the control box with the battery L-Bracket

**Caution:** Do not drop the battery



## Step 10

### Power up the board with the battery

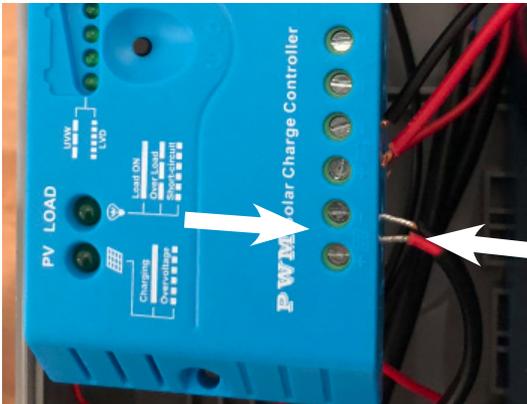
Connect the battery cables from the board to the 12v battery.

Ensure that the red cable is connected to the red terminal and the black cable to the black terminal

**Caution:** Observe Polarity. Wrongly installed polarity will damage the board



# Single Solar Wiring



## Best Solar Panel Angle for all year round

- \* Brisbane 38 °
- \* Sydney 45 °
- \* Melbourne 50 °
- \* Tasmania 56 °
- \* Adelaide 48 °
- \* Darwin 14 °
- \* Perth 43 °
- \* 0 ° being flat and 90 ° being vertical - panel must face FULL NORTH

### Step 11

#### Connect the cable from the solar panel to the solar regulator

Connect the positive and negative cable from the solar panel onto the regulator. Depending on colours of your cable:  
**(red + | brown + | black - | blue -)**

#### Caution:

Observe Polarity. Wrongly installed polarity will damage the regulator.

**Important:** just one hand print of shade on your solar panel can reduce your solar panels output by up to 80%.

#### INCORRECT



Solar panel should be installed with junction box at the top as shown below

It is not recommended that you cut your solar panel cable as this may be required at a later date eg. shading during winter may require a new position

#### CORRECT



# Single Solar Wiring

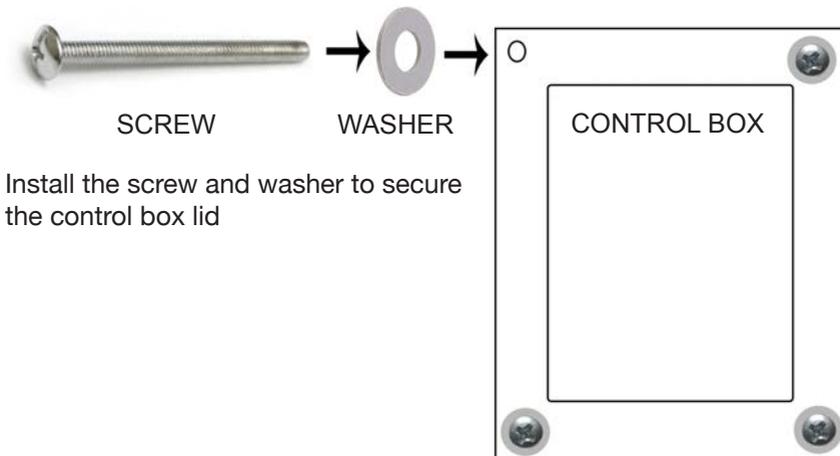
Check that the autogate system is operational before closing up the control box.

Set auto close via dip switches on control board if required

7 on = 60sec      8 on = 30sec      7 & 8 on = 120sec

## Pointers:

1. You may wish to expose the receiver antenna cable outside the control box to increase the remote control range.
2. Ensure that the mounting points on the control box are properly sealed to prevent water and insects from getting in.
3. Silicon off the conduit hole to prevent insects from getting into the control box via the wire conduits.
4. Highly recommend to charge your battery every 6-12months for 2 hours only on a battery charger to prolong the life of your battery.
5. Additional accessories connected to BMG Imports swing or slide gate motors may reduce the batteries performance e.g battery life and/or battery standby capacity during unfavourable conditions.



# Single Electric Wiring

## Electric Gate Opener Wiring



### Step 1

#### Mounting the control box

Install the control box at a suitable location. Use the pre-marked anchor points in the box.

**Do not drill holes above the computer board as this will allow water in and damage the board.**

# Single Electric Wiring



## Step 2

### Connect Motor Wires

Connect the Motor cables to MTA on the D1 board

**Note:** In the conduit, you should also have the wire from the transformer ready. If hardwired push button is to be connected, this wire should also be available

### Gate Direction

Red and Blue = pull to open  
Blue and Red = push to open



## Step 3

### Mount L Brackets

Mount the top L-Bracket onto the ledge in the control panel box with the screws provided then mount the 2nd L Bracket below as shown



# Single Electric Wiring

## Step 4

### Connect the Receiver

Wire the Receiver cables onto the D1 board

Red - [+PWR]

Black - [COM]

Grey- [1 side]

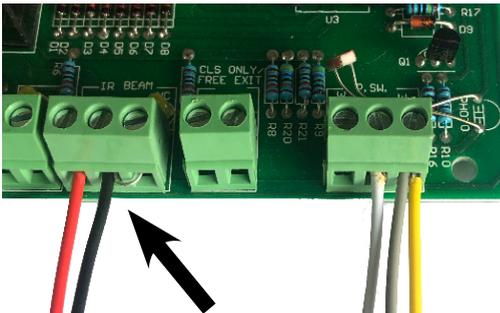
Yellow - [1 side]

White - [COM]

Black antenna - leave free

Remote button Green = Yellow

Remote button Red = Grey



Jumper

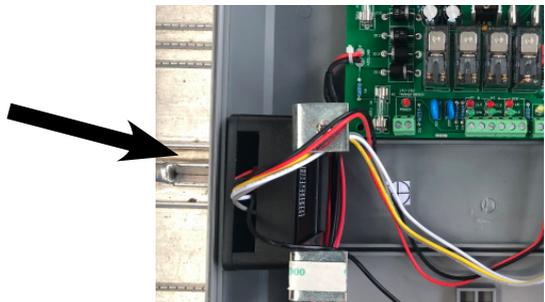
*If you ordered the long range receiver, please refer to page 16 or the user manual provided for the wiring setup.*

Important: when wiring in the black and red cable into the IR BEAM section, the NC light must always be ON. If it's not on make sure the the jumper wire is connected in screws COM and NC

## Step 5

### Place Receiver at the side

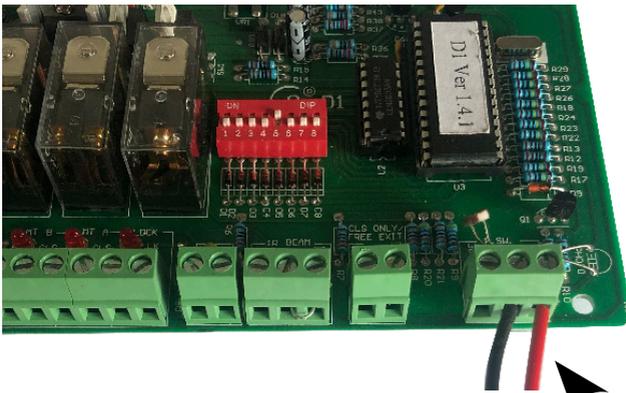
Tidy up the receiver cables and slide the receiver onto the left of the control panel. Receiver will be naturally secured by the L Brackets



# Single Electric Wiring



**Please note: speaker cable not supplied in kit**



## Push Button Installation

To secure the push button, screw to a post.  
Silicon any holes including screw holes as well as around the back of the push button where it attaches to the post.  
This will prevent water and insects getting inside the push button.

Using fine speaker wire, connect to the 2 ports inside the push button (1 strand in each port), then at the other end connect 1 strand into the D1 board [1 side] and the other strand into the [COM]. Make sure you have a good connection.

# Single Electric Wiring



## Step 6

### Secure the battery

Place the battery in the control box with the battery L-Bracket

**Caution:** Do not drop the battery



## Step 7

### Power up the board with the backup battery

Connect the battery cables from the board to the 12v 7ah backup battery.

Ensure that the red cable is connected to the red terminal and the black cable to the black terminal

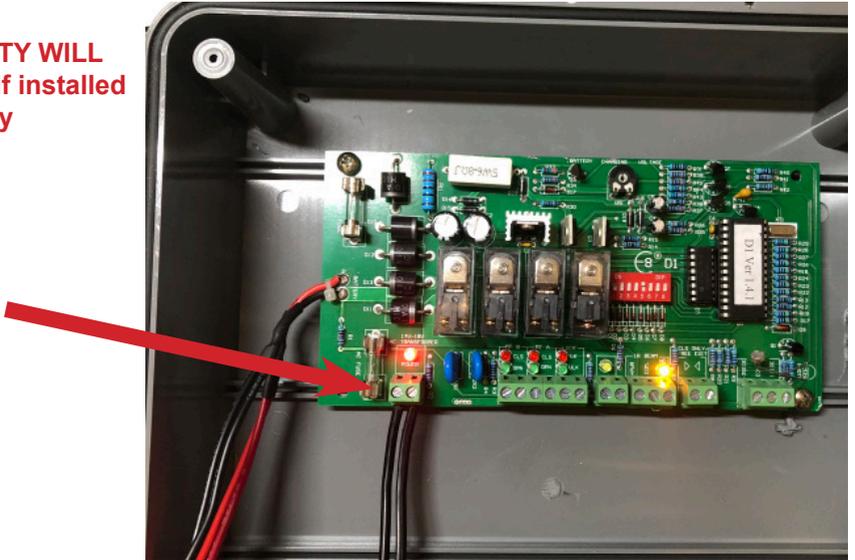
**Caution:** Observe Polarity. Wrongly installed polarity will damage the board

# Single Electric Wiring

Step 8

Connect the cable from the transformer **DIRECT** to the D1 board as shown in the photo below. Transformer is not polarity sensitive.

**Caution:**  
**WARRANTY WILL**  
**BE VOID if installed**  
**incorrectly**



# Single Electric Wiring

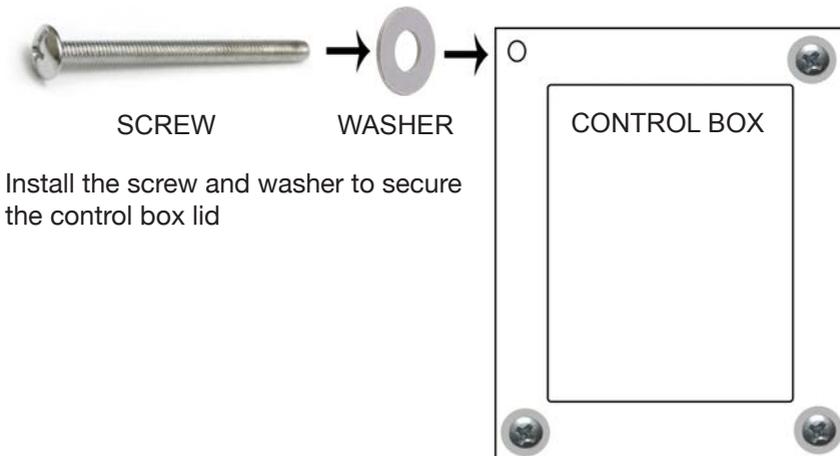
Check that the autogate system is operational before closing up the control box.

Set auto close via dip switches on control board

7 on = 60sec    8 on = 30sec    7 & 8 on = 120sec

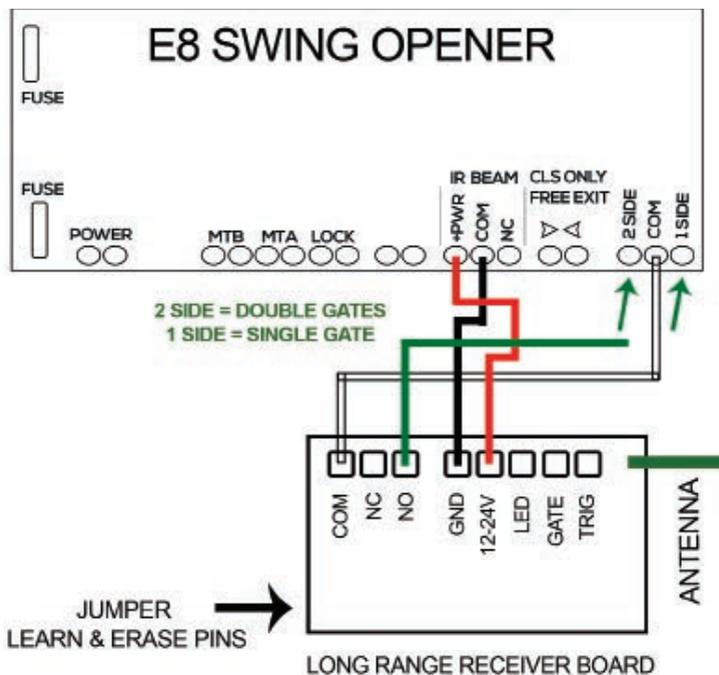
## Pointers:

1. You may wish to expose the receiver antenna cable outside the control box to increase the remote control range.
2. Ensure that the mounting points on the control box are properly sealed to prevent water from getting in.
3. Silicon off the conduit hole to prevent insects from getting into the control box via the wire conduits.



Install the screw and washer to secure the control box lid

## Long range receiver wiring



## Keyed push button wiring

