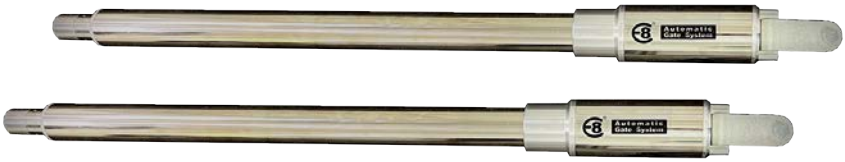
Automatic Gate System

E8 500 Swing Gate Opener Wiring Guide to

SOLAR & ELECTRIC DOUBLE KIT

FAILURE TO FOLLOW THESE INSTRUCTIONS
MAY VOID YOUR WARRANTY



Scan the QR Codes below for further assistance

Website support page

Helpful Videos

CONTENTS

WIRING GUIDE TO ELECTRIC & SOLAR DOUBLE GATE OPENER

CONTENTS

Tip: Green connector blocks on the main control board can be removed to help with wiring in cablesx

We highly recommend an electric gate lock for gates 3mtrs or longer

Double Solar

Step 1

Mounting the control box

Install the control box at a suitable location, no further than 1mtr from the master gate.

Use the pre-marked anchor points in the box to secure.

Highly recommend to silicone around these screws to prevent any water seeping into the control box and also preventing insect infestation.

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

Step 2

Prepare Regulator on Z Bracket

Prepare the regulator by mounting the Z Bracket at the screw hole located near the battery indicator lights with the bolt and nut provided.

Note: regulators may differ slighty in apperance to below photos

Double Solar

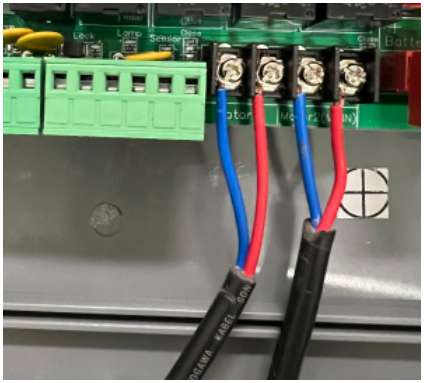
Step 3

Connect Motor Wires

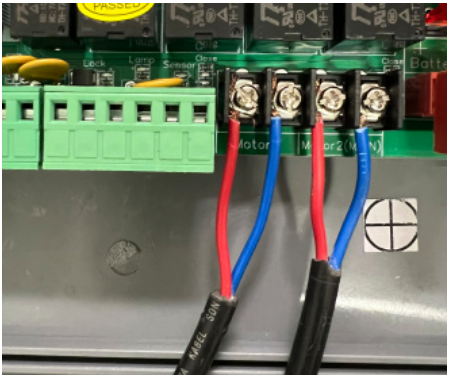
Connect the Motor cables to MOTOR1 and MOTOR2 (MAIN) on to the EGA board. MOTOR2 should be the arm closest to the control box and MOTOR1 shoud be the slave arm furtherest away from the control box.

Ensure no motor wires are visible once screwed into the terminals to prevent any short circuiting from them touching.

Note: In the conduit, you should also have 1 wire to the solar panel ready. If the hard wired push button or keypad is to be connected, this wire should also be available



Gate Direction
Pull to open
Blue (left) - Red (right)

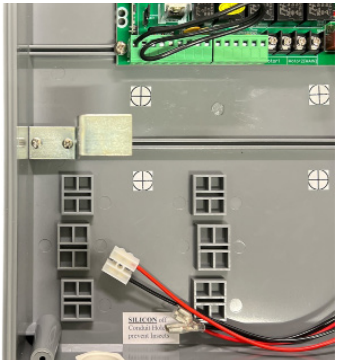


Gate Direction
Push to open
Red (left) - Blue (right)

Step 4

Mounting the Z Bracket

Mount 1 Z Bracket
onto the ledge in the
control panel box as shown



Double Solar

Step 5

Mounting the Regulator

Mount the regulator onto the second ledge in the control box as shown using the second Z bracket.

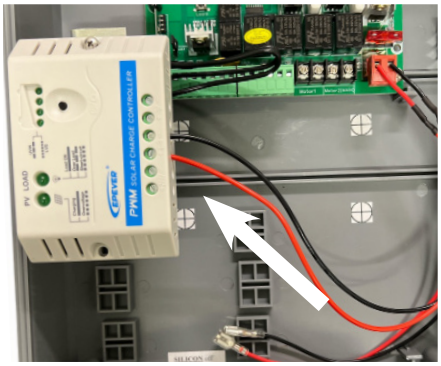
Step 6

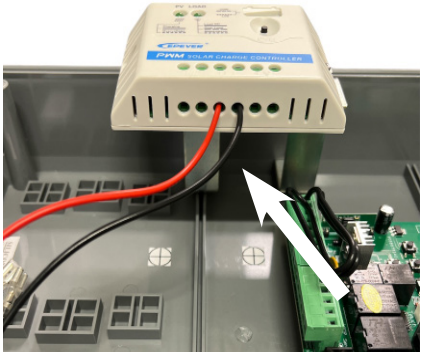
Connecting the regulator cables

Connect the red and black cable from the EGA control board to the battery terminals of the regulator (you may need to remove these cables from the plastic connector)

Making sure:
red is to + (positive)
black is to - (negative)

Do NOT connect the cable from the solar panel yet

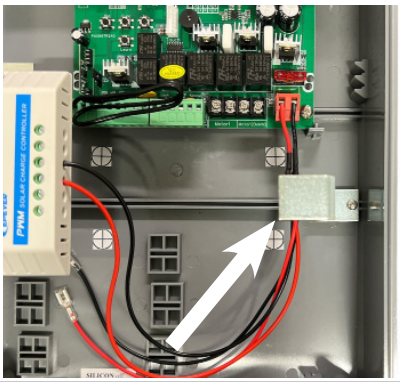




Double Solar

Step 7

Secure the 12 volt battery with the large Z bracket and screws provided
Caution: Do not drop the battery



Step 8

Power up the EGA control board

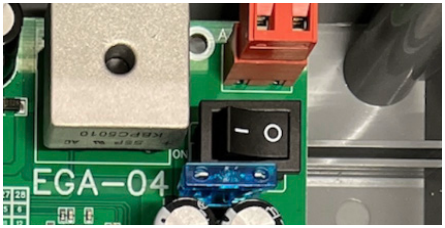
Connect the battery cables from the EGA control board to the 12v battery.

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

Once you have your battery cables connected you will need to make sure your control board is turned on - see images below

Switch turned ON



Switch turned OFF

Double Solar

Step 9.

Connect the positive and negative cable from the solar panel to the solar regulator terminals as shown in the photo below

Depending on your colour of your solar panel cables:
(red + | brown + | black - | blue -)

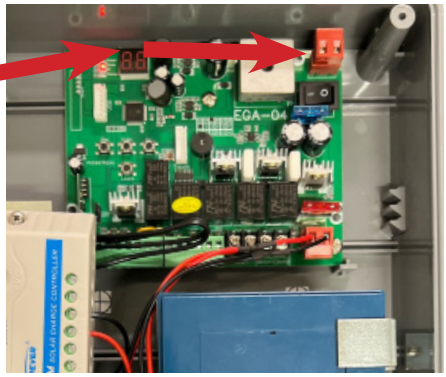
Caution:
Observe Polarity.
Wrongly installed polarity will damage the regulator.

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

View page 35 in your Installation & User Manual for the correct setup of your solar panel when installing

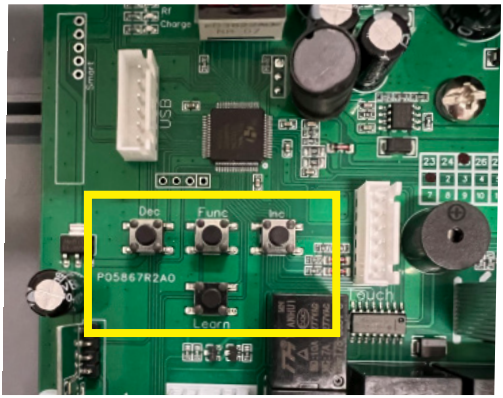
Caution:
DO NOT wire your solar panel cables into the AC terminal as shown in this image. You will damage your control board and void your warranty.



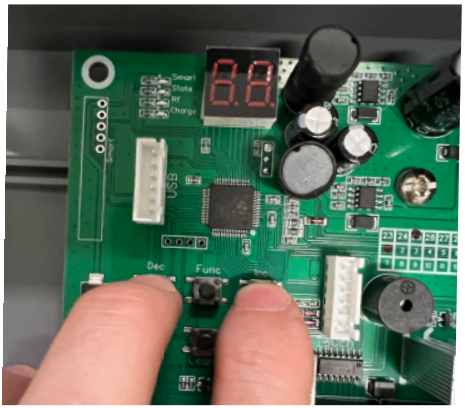
Double Solar

VERY IMPORTANT

At this point with your actuator arms connected and your battery and solar panel powering the control board, your next step will be running the “Auto Travel Function” which you will find details on in your Installation & User Manual on page 37



SCAN ME - to watch the video ‘teaching the travel function’

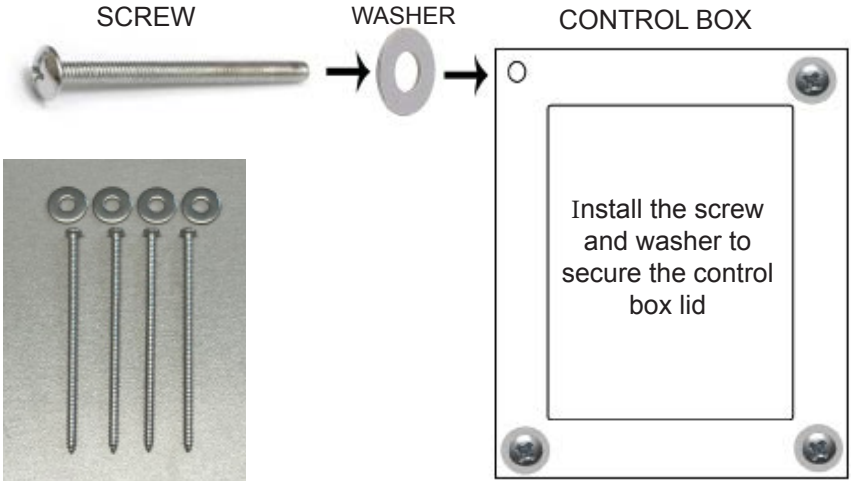


The auto travel fuction learns the setup of your gate. It’s very important that you do this function.
It involves using the INC and DEC buttons located on your control board.

Note: If you have performed the travel function correctly, your gate will now slow down approx. 200mm before it’s full open and full closed positions.

Double Solar

Attaching your control box lid using the screws & washers provided



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

Auto close will not be active.
Please see main user manual and set auto close after installation is complete.

Recommendations & notes:

1. Ensure that the mounting points on the control box are properly sealed to prevent water and insects from getting in.
3. Silicone off the conduit hole to prevent insects from getting into the control box via the wire conduits.
4. For solar we highly recommend to charge your battery every 6 - 12 months for 2 hours only on a 12v battery charger to prolong the life of your battery.
5. Additional accessories connected to BMG's swing motors may reduce the batteries performance e.g battery life and/or battery standby capacity during unfavourable conditions.
6. We recommend every 6 - 12 months to do a thorough check over the complete unit and it's internals to make sure there is no insect infestation and that everything is still in good working order.

Double Electric

Step 1

Mounting the control box

Install the control box at a suitable location, no further than 1mtr from the master gate.

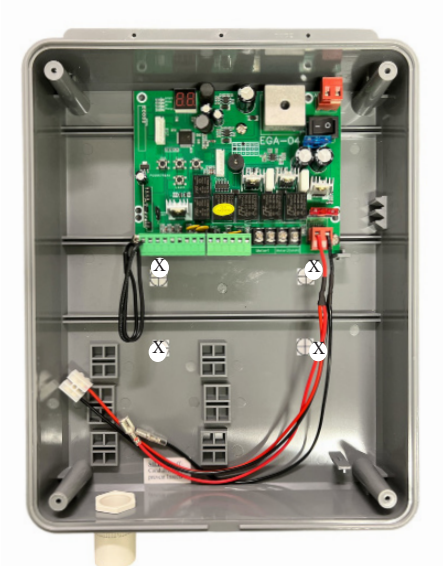
Use the pre-marked anchor points in the box to secure.

Highly recommend to silicone around these screws to prevent any water seeping into the control box and also preventing insect infestation.

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

The red and black battery cables from the main control board are for battery back if required. We recommend a 12v 7ah batttery for backup.

The red and black cable that runs to a plastic connector block is for solar only. Leave these wires connected to the plastic connector for the electric kit.



Tip: Green connector blocks and brown connector block on the main control board can be removed to help with wiring in cables

Double Electric

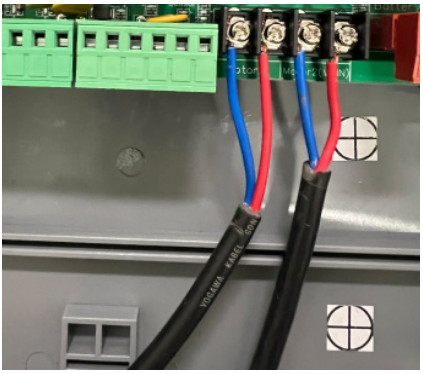
Step 2

Connect Motor Wires

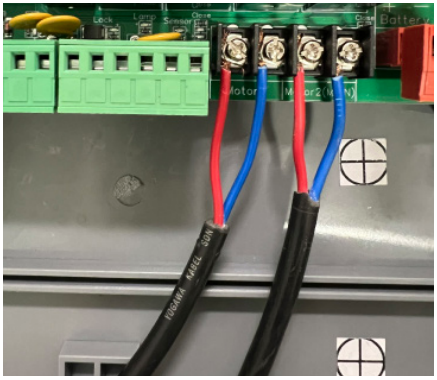
Connect the Motor cables to MOTOR1 and MOTOR2 (MAIN) onto the EGA board. MOTOR2 should be the arm closest to the control box and MOTOR1 shoud be the slave arm furtherest away from the control box.

Ensure no motor wires are visible once screwed into the terminals to prevent any short circuiting from them touching.

Note: In the conduit, you should also have 1 wire to the transformer. If a hard wired push button or keypad is to be connected, this wire should also be available.



Gate Direction
Pull to open
Blue (left) - Red (right)



Gate Direction
Push to open
Red (left) - Blue (right)

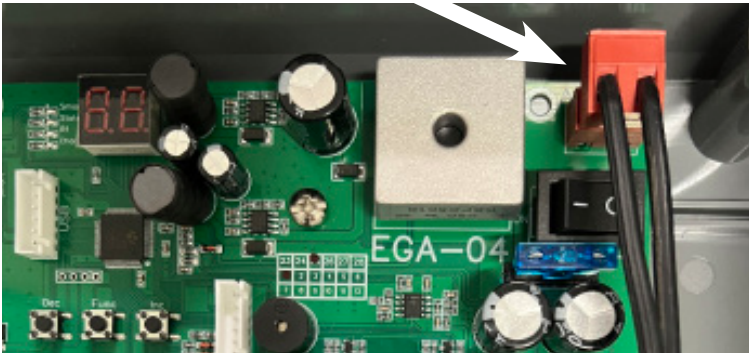
Double Electric

Step 3

Connect the cable from the transformer
Connect the 2 cables from the transformer **DIRECT** to the EGA control board terminal AC12-16V (located top right hand corner of control board, this connector block can be removed to wire cables in) as shown in the photo below and turn on at the power point.

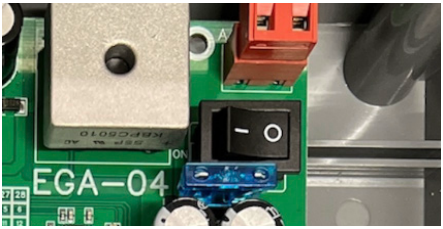
Transformer is not polarity sensitive.

Caution:
WARRANTY WILL BE VOID if installed incorrectly
DO NOT connect 240volts direct to the gate opener
DO NOT hardwire the transformer to 240volt, it must plug into a 240volt power point
DO NOT cut the plug end of the transformer for any reason



Once you have your transformer cables connected you will need to make sure your control board is turned on - see images below

Switch turned ON

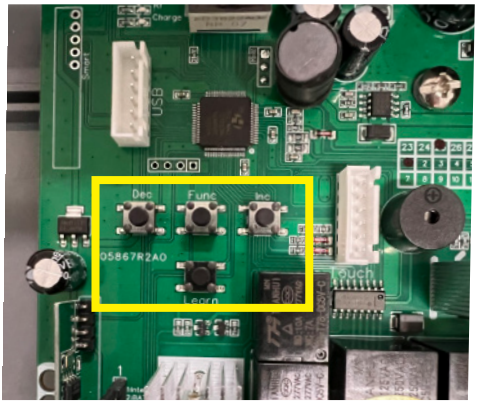


Switch turned OFF

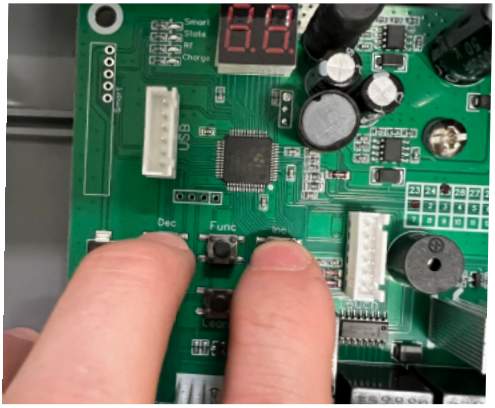
Double Electric

VERY IMPORTANT

At this point with your actuator arms connected and your battery and solar panel powering the control board, your next step will be running the "Auto Travel Function" which you will find details on in your Installation & User Manual on page 37



SCAN ME - to watch the video 'teaching the travel function'



The auto travel fuction learns the setup of your gate. It's very important that you do this function.
It involves using the INC and DEC buttons located on your control board.

Note: If you have performed the travel function correctly, your gate will now slow down approx. 200mm before it's full open and full closed positions.

Double Electric

Step 4 - Optional

Secure the 12v battery if supplied

Place the battery in the control box with the battery Z bracket supplied

Caution: Do not drop the battery

Connect the battery cables from the EGA control board to the 12v backup battery.

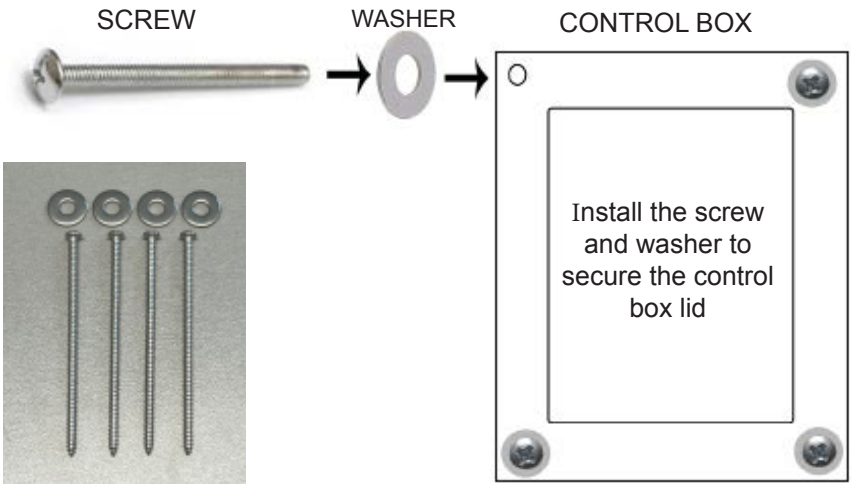
Ensure that the red cable is connected to the red terminal and the black cable to the black terminal

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

The red and black cable that runs to a plastic connector block is for solar only. Leave these wires connected to the plastic connector for the electric kit.

Double Solar

Attaching your control box lid using the screws & washers provided



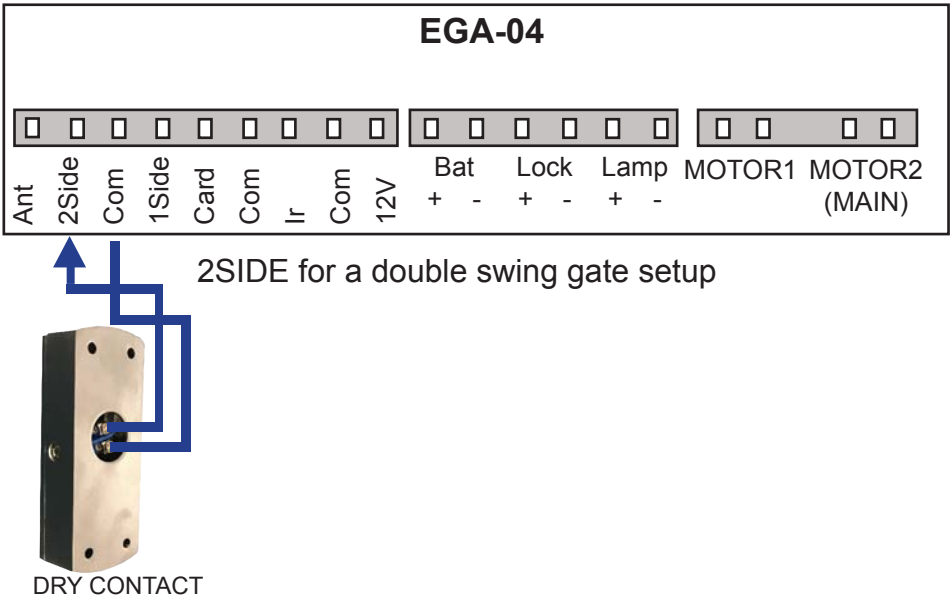
Check that the autogate system is operational before closing up the control box.

Auto close will not be active.
Please see main user manual and set auto close after installation is complete.

Recommendations & notes:

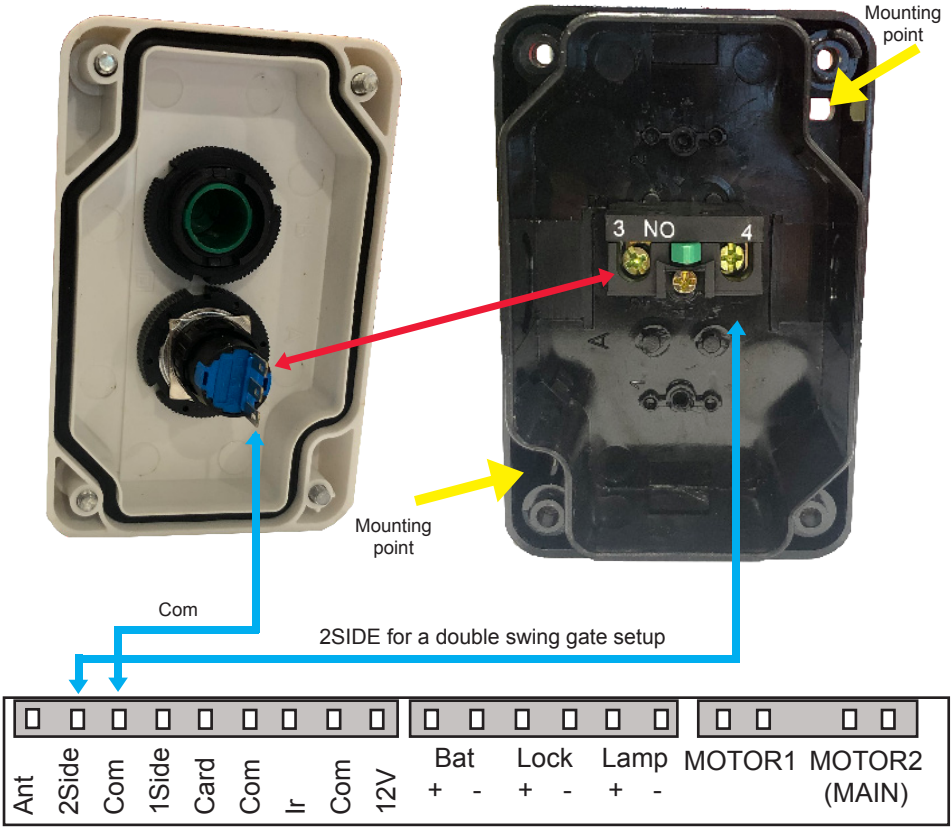
1. Ensure that the mounting points on the control box are properly sealed to prevent water and insects from getting in.
2. All cabling must go through the entry hole located at the bottom of the control box.
3. Silicone off the conduit hole to prevent insects from getting into the control box via the wire conduits.
4. If you have the backup battery connected, we recommend every 6 - 12 months to check your battery is still working by turning the powerpoint off and testing the unit just on battery power.
5. Additional accessories connected to BMG's swing motors may reduce the batteries performance e.g battery life and/or battery standby capacity during unfavourable conditions.
6. We recommend every 6-12 months to do a thorough check over the complete unit and it's internals to make sure there is no insect infestation and that everything is still in good working order.

WIRING FOR STANDARD PUSH BUTTON



Tip: Green connector blocks on the main control board can be removed to help with wiring in cables

WIRING FOR KEY PUSH BUTTON



Please note that the coloured cables in our above images are for examples only and may not match the coloured cables that you will be using.

When wiring up the push button, you will be able to use the key to lock and disable the button. Follow both coloured wiring instructions (pink and blue) as above.

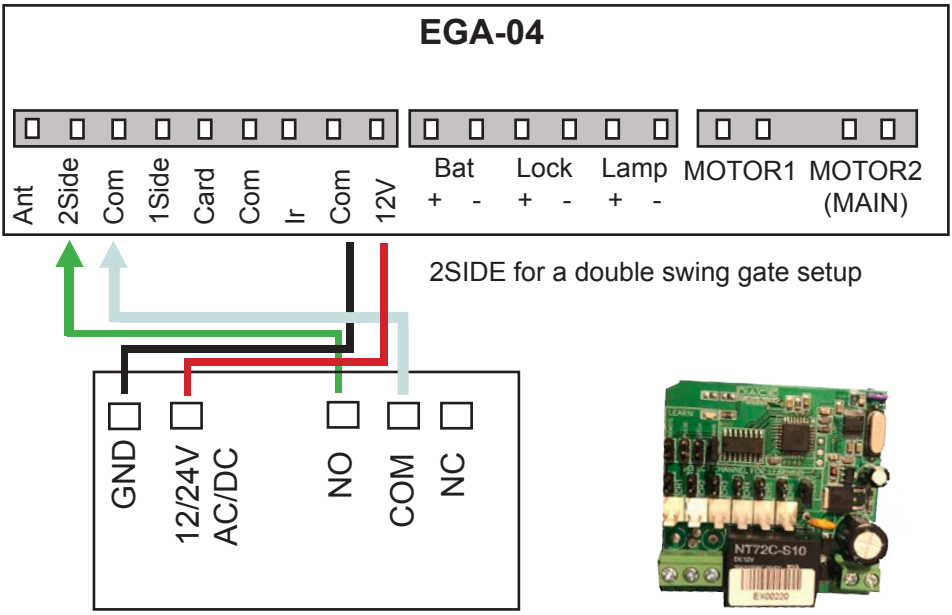
When securing the blue and pink cable to the internal pins of the lock you can either secure by soldering the cable, threading cable through the hole to secure it or secure cable with a connector.

When you attach the push button unit to your post, even though the button housing is a sealed unit, we highly recommend sealing (silcone) all the way around the back housing to prevent any water or insects entering in through your screws. Also when you drill the hole for your cabling we recommend to silcone up that entry point.

We recommend every 6-12 months to do a thorough check over the push button and it's internals to make sure there is no insect infestation and that everything is still in good working order.

Please be aware that failure to perform the recommendations above may void your warranty.

WIRING FOR 7 CHANNEL LONG RANGE RECEIVER



LONG RANGE 7 CHANNEL RECEIVER

Tip: Green connector blocks on the main swing control board can be removed to help with wiring in cables

NOTES