Wiring Guide to

SOLAR & ELECTRIC

SINGLE GATE OPENER

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY VOID YOUR WARRANTY

Automatic Gate System

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WIRING GUIDE TO ELECTRIC & SOLAR SINGLE GATE OPENER

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

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Solar Gate Opener Wiring

Step 1

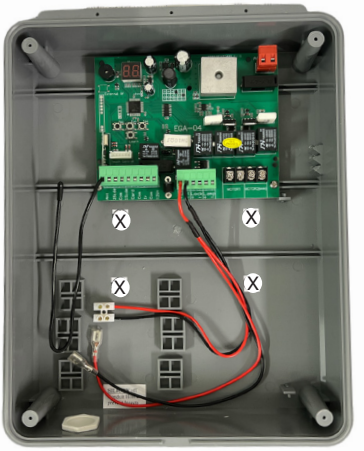
Mounting the control box

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

Single Solar Wiring

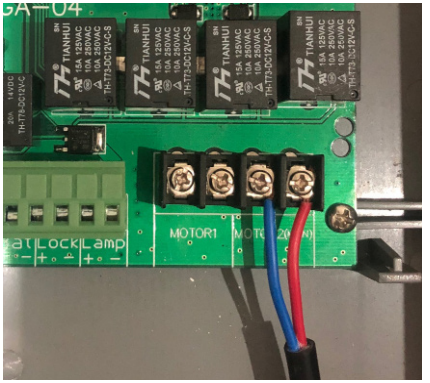
Step 3

Connect Motor Wires

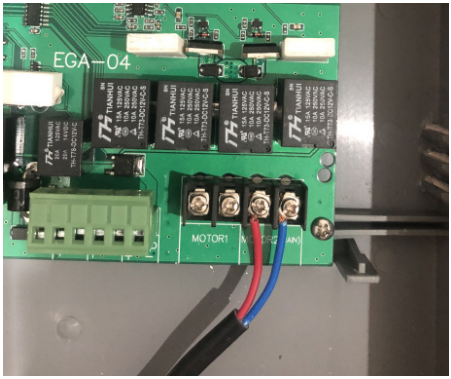
Connect the Motor cables to MOTOR2 (MAIN) on to the EGA board

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)

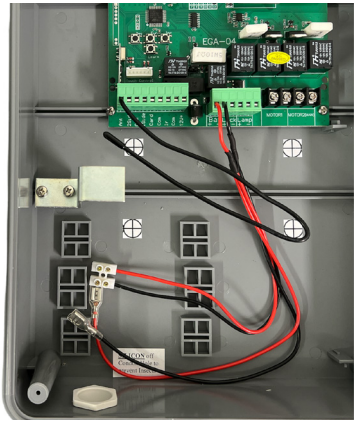


Gate Direction
Push to open
Red (left) - Blue (right)

Step 4

Mounting the Z Bracket

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

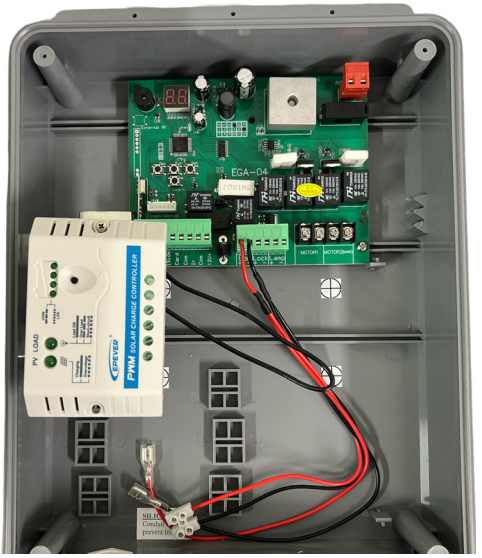


Single Solar Wiring

Step 5

Mounting the Regulator

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



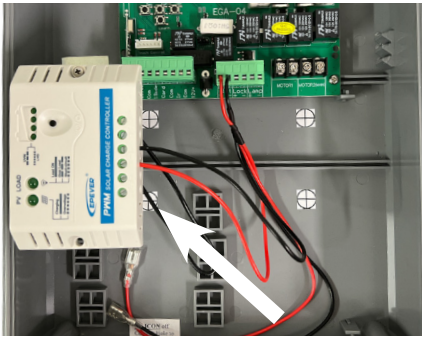
Step 6

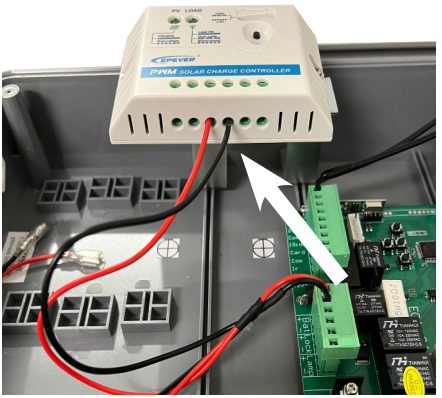
Connecting the regulator cables

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





Single Solar Wiring

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

Single Solar Wiring

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

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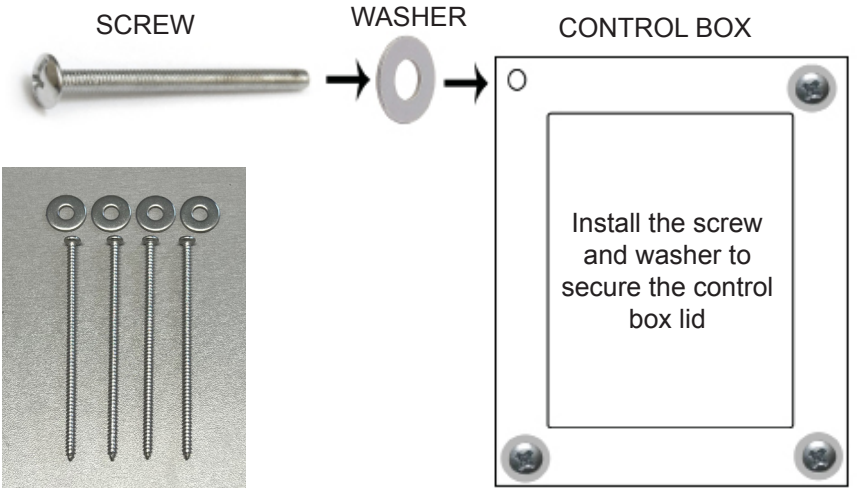
IMPORTANT:
At this point with your actuator arm connected and your battery and solar panel powering the control board, your next step will be running the "Auto Travel Function" which you will find details on in your Installation & User Manual on page 38

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

Single Solar Wiring

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. 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.

Single Electric Wiring

Electric Gate Opener Wiring

Step 1

Mounting the control box

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

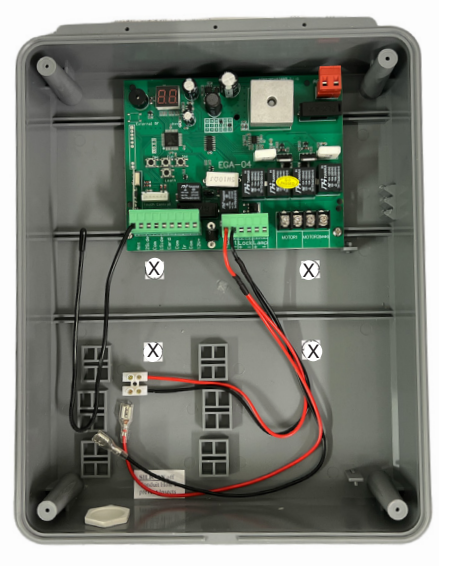
Use the pre-marked anchor points in the box to secure.

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

Single Electric Wiring

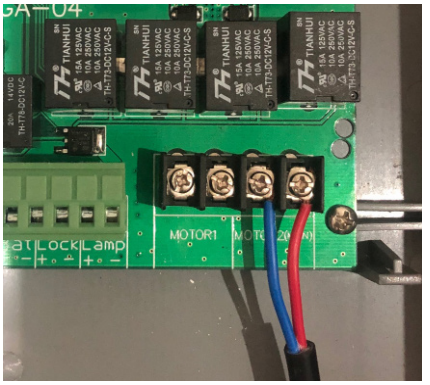
Step 2

Connect Motor Wires

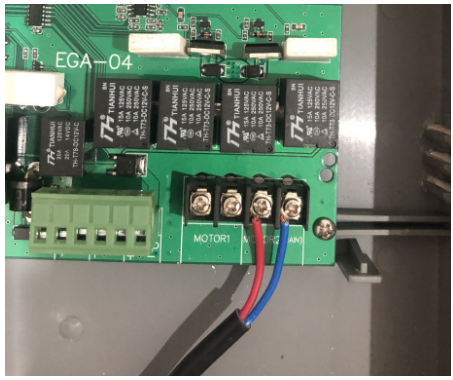
Connect the Motor cables to MOTOR2 (MAIN) on to the EGA board

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)

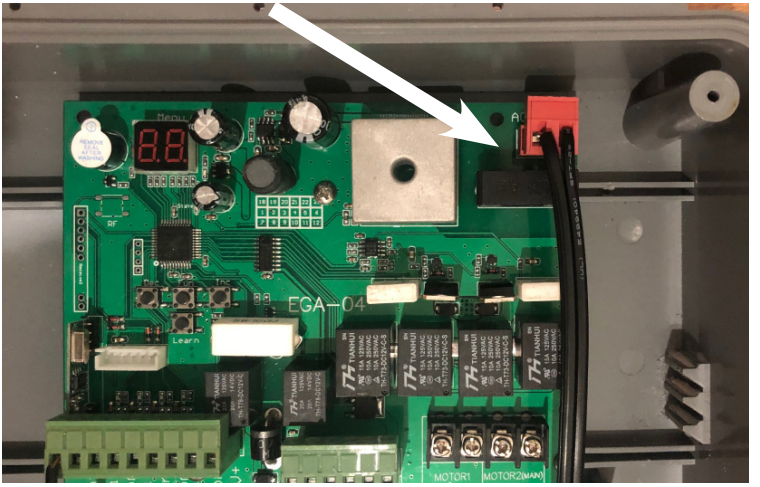
Single Electric Wiring

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



IMPORTANT:
At this point with your actuator arm connected and the transformer powering the control board, your next step will be running the "Auto Travel Function" which you will find details on in your main Installation & User Manual on page 38

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

Single Electric Wiring

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

Power up the board with the backup battery

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

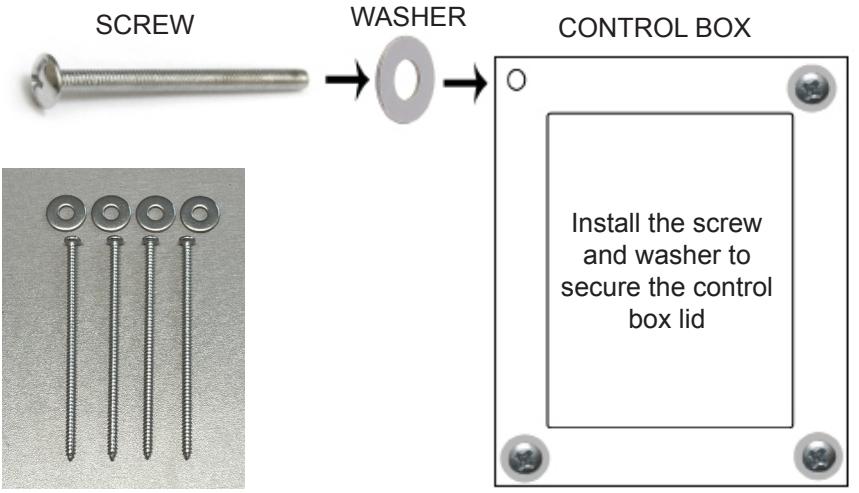
Ensure that the red cable is connected to the red terminal and the black cable to the black terminal

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.

Single Electric Wiring

Attaching your control box lid using the screws provided



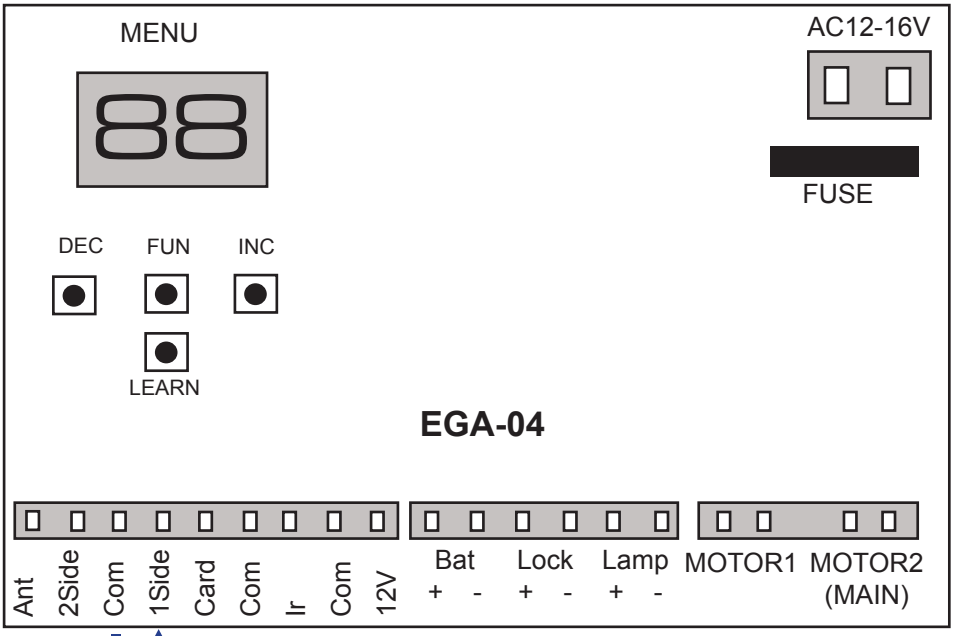
Check that the autogate system is operational before closing up the control box.

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.

WIRING FOR STANDARD PUSH BUTTON

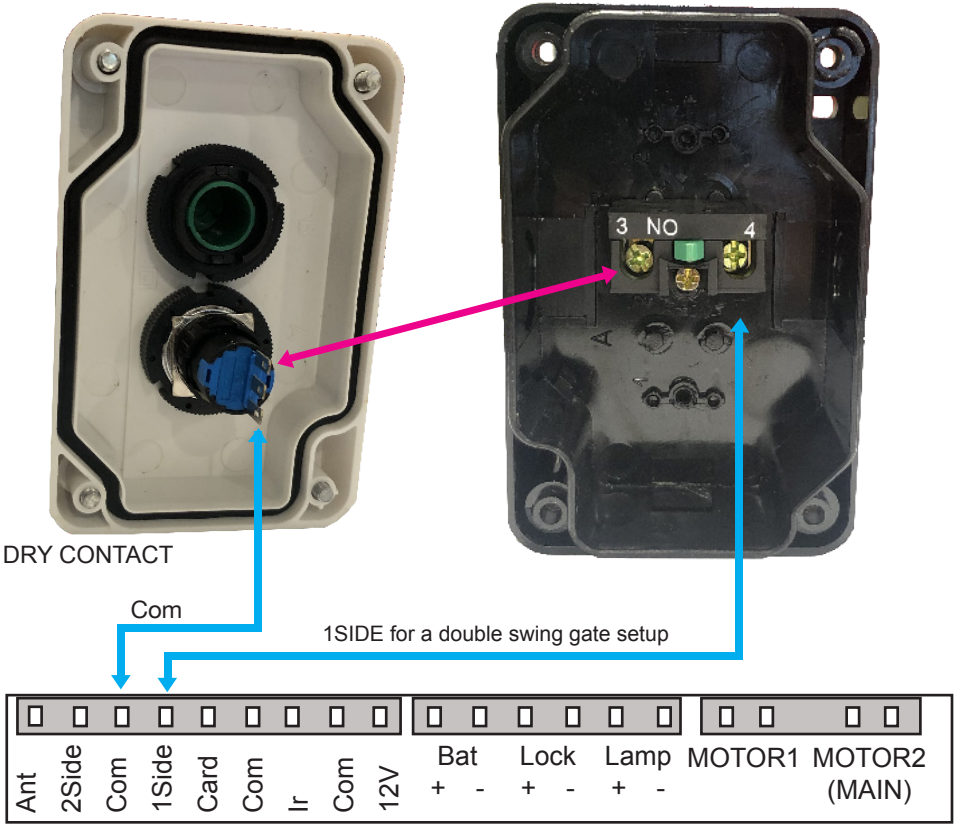


DRY CONTACT

1SIDE for a single swing gate setup

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.

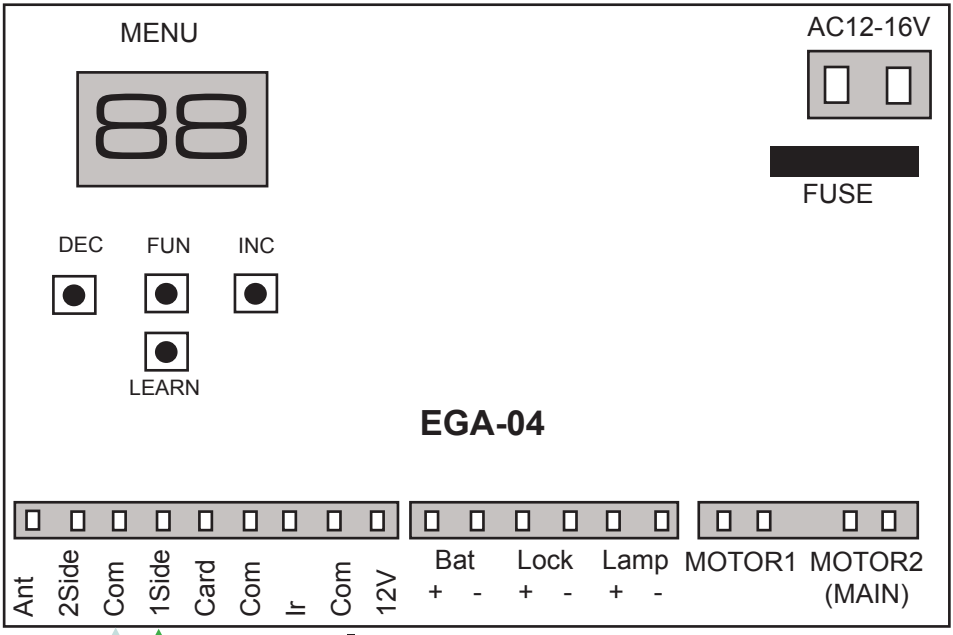
When securing the blue and pink cable to the internal pins of the lock you can either secure by soldering the cable, threading cable through the hole to secure it or secure cable with a connector.

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.

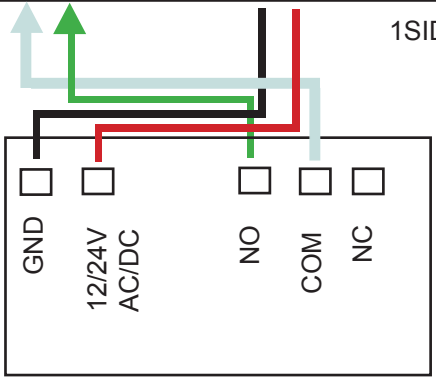
We recommend every 6-12 months to do a thorough check over the push button and it's internals to make sure there is no insect infestation and that everything is still in good working order.

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

WIRING FOR 7 CHANNEL LONG RANGE RECEIVER



1SIDE for a single swing gate setup



LONG RANGE 7 CHANNEL RECEIVER

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