GREAT MATE SINGLE GATE OPERATOR

Solar & 240/12V

For Professional & DIY Installation Interim Instruction Manual

Warning:

Failure to read & comply with these installation instructions and/or safety warnings may result in serious personal injury and/or property damage and affect your warranty

Technical support is available 8.30 am to 4.00 pm Monday to Friday [Except public Holidays]
02 6280 4655 only

Sun-Power Auto Gates
129 Gladstone St Fyshwick ACT 2609





Important Safety Warnings

Please read these important safety warnings before attempting to install or use this product.

Do not operate the gate motor unless the gates are in full view and free from objects such as cars and other obstructions.

Children must be supervised near the gates at all times, especially when the gate motor is in use.

Ensure that the obstruction sensing function of the gate motor is operational and adjusted as necessary.

Keep hands and any loose clothing well clear of the gate(s) and gate motor at all times.

Before attempting to service the gate operator or removing the cover, turn off and / or disconnect the power to the gate motor. If you are unable to do this, then we strongly recommend you call an electrician. Care should be taken as there are moving components inside the gate operator that may cause damage or personal injury.

Keep any gate controllers [Remote Controls] out of reach of children. Any wired orwireless controllers must be installed away from any moving parts, and it must be at a minimum height of 1.5m from the ground.

Regularly check that all safety features and safety accessories are fully functioning.

Warning:

Failure to read & comply with these installation instructions and/or safety warnings may result in serious personal injury and/or property damage and affect your warranty

Installation Checklist

Read all instructions and data sheets before installing the gate motor kit. Failure to follow the instructions could void warranty.

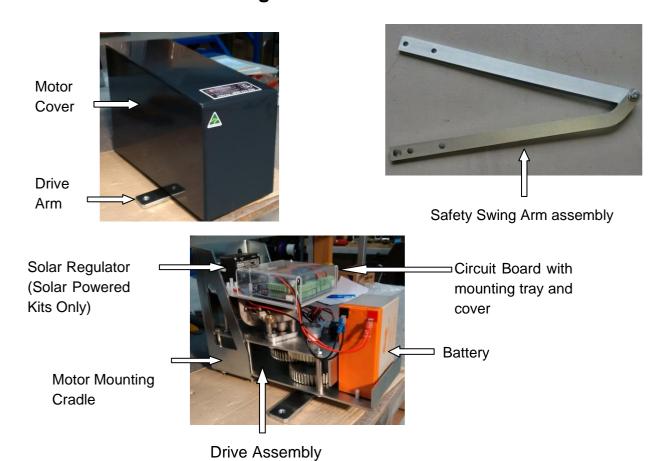
Ensure the gate is in good condition, opens and closes freely for its full length of travel and it does not hit or bind on the driveway or garden beds. Remove any wheels that are fitted to the gate.

Ensure the gate is correctly and securely mounted to the hinge post which should be firmly placed in the ground.

Generally, the gate motor requires about 400mm to 500mm side clearance from the gate hinge to allow the arms to rotate around during the opening of the gate.

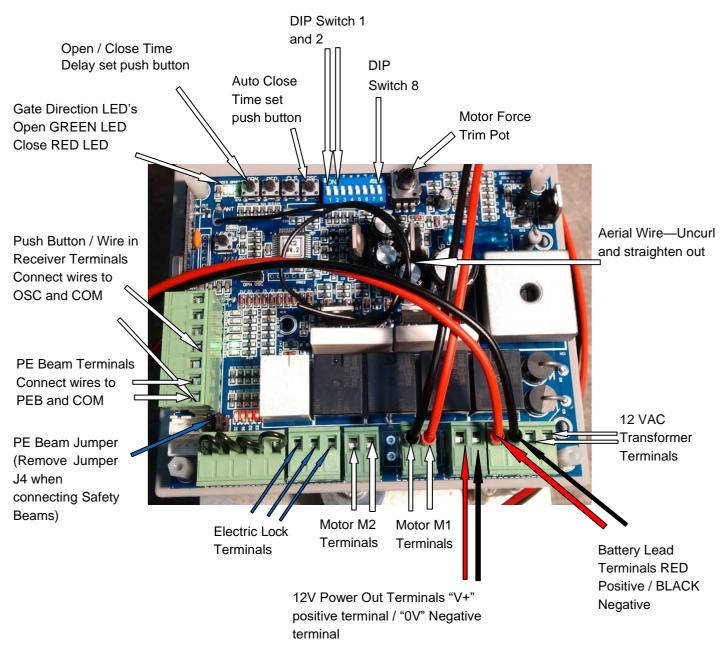
Fig. 8 Cable for Double Gate Kits is included.

Place the gate motor on a suitable work bench. Unpack the motor and remove the metal motor cover. Visually inspect the motor to ensure nothing has moved during transit. Refer to the "DC 2 Circuit Board" data sheet included with this manual and familiarise yourself with the layout and location of the items and wiring terminals.

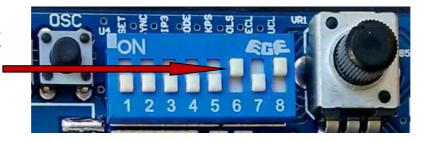


GATE MATE DC2 Circuit Board

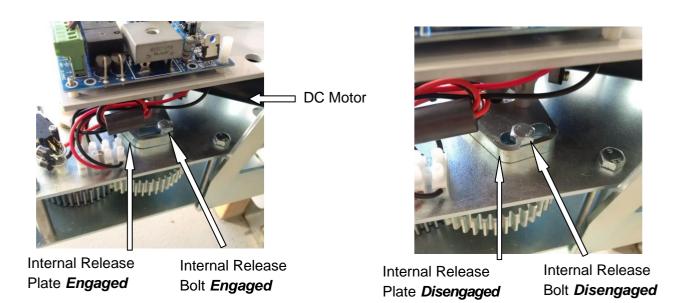
Data Sheet



CAUTION—DIP SWITCH 6 MUST
BE IN THE 'ON' POSITION



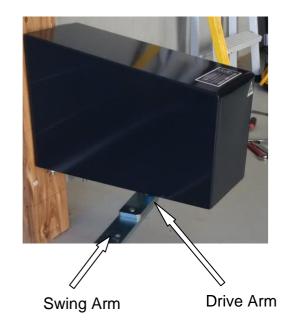
Internal Manual Release

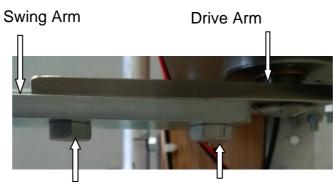


Remove the motor cover. Use two 13 mm spanner to loosen the manual release nut and bolt. Push the DC motor away from the gears to disengage the motor and allow the gate drive arm to move by hand.

Pull the DC motor back towards the gears to engage. Ensure the DC motor gear has meshed with the drive gear. Fully tighten the Internal Release Bolt and check the gears are engaged.

External Manual Release





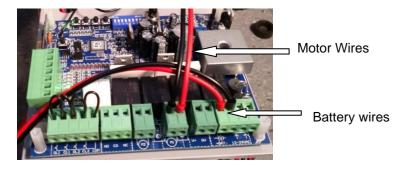
Use a 19 mm spanner to undo the two bolts. Fold the swing arm back and tie up to the bottom of the gate. Screw the two bolts back into the Drive Arm.

Battery Connection for Bench Testing

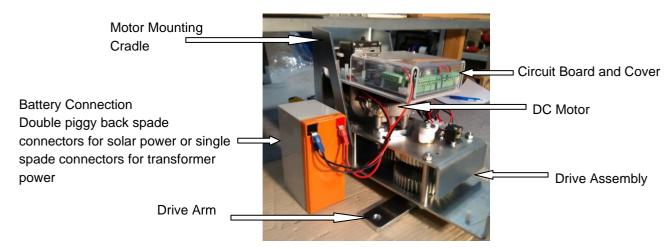
ALWAYS TURN THE POWER OFF AND DISCONNECT THE BATTERY and SOLAR PANEL BEFORE MAKING ANY WIRING CONNECTIONS

We recommend the gate motor settings and direction of rotation be set up and tested prior to installation. Place the gate motor on a suitable work bench.

<u>Care should be taken as there are moving components inside the gate operator that may cause damage or personal injury.</u>



Refer to the "DC 2 *Circuit Board*" data sheet included with this manual and locate the battery wires on the circuit board. Ensure the battery wires are correctly connected to the correct terminals on the circuit board.



Place the battery on the bench next to the motor.

Connect the battery wires to the battery terminals on the battery. Note the polarity (**Red** wire to **Red** battery terminal, **Black/Blue** wire to **Black** battery terminal). The board should now be powered and great care should be taken to avoid shorting out or otherwise damaging the circuit board.

Activate the gate motor using one of the handset remote. The remotes are coded to the gate motor during assembly. Alternatively, refer to the "*Handset Remote Programming*" data sheet to code in the handset. Press the handset again to stop the motor and press the handset again to reverse the motor direction. To stop the motor, press the remote handset or disconnect a battery lead.

Refer to the "DC2 Circuit Board" data sheet included with this manual and locate the direction LED's on the circuit board.

The GREEN LED indicates opening direction and the RED LED indicates closing direction.



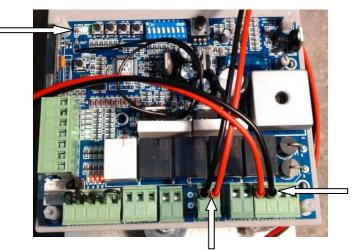


ALWAYS TURN THE POWER OFF AND DISCONNECT THE BATTERY AND SOLAR
PANEL BEFORE MAKING ANY WIRING CONNECTIONS

Activate the gate motor using the handset remote and check the rotation of the motor drive arm is turning in the correct direction for opening the gate and the GREEN LED light is on OR the correct direction for closing the gate and the RED LED light is on.

If the motor is going in the wrong direction, disconnect all power. Refer to the "*DC2 Circuit Board*" data sheet included with this manual and locate the 'M1 Motor' terminals on the circuit board. Swap the red and black motor wires connected to 'M1 Motor terminals on the circuit board. The red wire should be connected to the terminal that had the black wire connected to it and the black wire should be connected to the terminal that had the red wire connected to it. This will reverse the direction of the motor.

Opening Direction
Green LED is on
Closing Direction
Red LED is on



□ Battery Wires

M1 Motor Terminals. Red and Black Wires.

Activate the gate motor again using the handset remote and check the rotation of the drive gear is turning in the correct direction for opening the gate and the GREEN LED light is on OR closing the gate and the RED LED light is on.

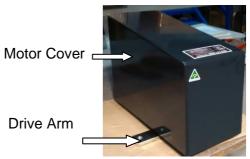
Care should be taken as there are moving components inside the gate motor that may cause damage or personal injury.

Mounting the Gate Motor

The gate motor should be mounted on a solid post or pillar about 50mm — 100mm from the gate hinges and the motor shaft should be approximately at the same level as the bottom rail of the gate

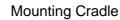
Place the complete motor on a work bench. Remove the black steel motor cover. Take note or a photo detailing how the gate motor is assembled and the circuit board wiring for possible future reference.

Separate the drive assembly and circuit board from the gate motor mounting cradle by undoing the 4 nuts underneath the motor holding the drive assembly in the mounting cradle and remove the drive assembly and circuit board from the gate motor mounting cradle. Take care not to damage the circuit board or allow it to get wet.

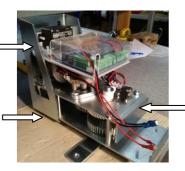


Undo the 4 nuts underneath the motor.

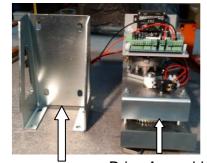




Undo 4 nuts underneath gate motor to remove Motor assembly.



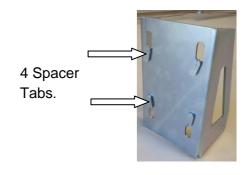
Complete Motor Assembly without cover



Mounting Cradle

Drive Assembly with Circuit Board

Check the 4 spacer tabs are in place on the back of the mounting cradle. If the spacer tab has fallen off then attach it with silicon otherwise use packing washers to replace the spacer tab. The spacer tabs allow the lip of the motor cover to be correctly fitted over the mounting cradle.



Ensure the lip of the motor cover correctly fitted over the mounting cradle.

Great Mate

INSTALLATION AND SET UP INSTRUCTIONS

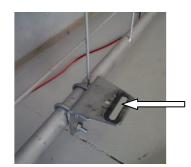
Mounting the Gate Motor (con't)

Loosely attach the mechanical latch swing arm bracket to the bottom rail of the farm gate approximately 800mm to 900mm from the inside of the hinge post and tighten by hand. Place a spirit level (or a straight piece of wood with a small spirit level), on the top of the arm bracket, level off the spirit level and mark the post on the underside of the spirit level. Measure upwards 20mm from this mark and draw a straight line. Place the bottom edge of the mounting cradle on this line and mark and drill the mounting holes or use the mounting template included in these instructions. Firmly attach the mounting cradle to the post and check that the cradle is level. Fit the drive assembly into the cradle. Ensure the washers are in place and fully tighten the 4 nuts to firmly secure the drive assembly in the mounting cradle. Remove the mechanical latch swing arm bracket from the gate.

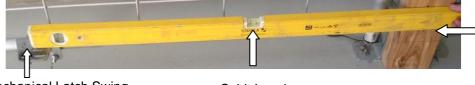




Mechanical Latch Swing Arm Bracket with Brass Olive, Bolt and Nut

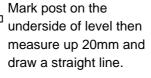


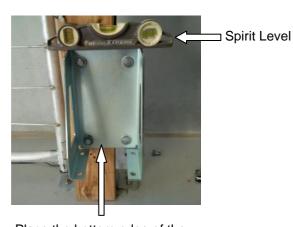
Loosely
attach
Mechanical
Latch Swing
Arm Bracket
to gate.



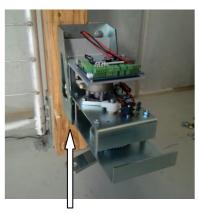
Mechanical Latch Swing Arm Bracket.

Spirit Level





Place the bottom edge of the mounting cradle on this line and mark and drill the mounting holes. Firmly fit mounting cradle and ensure it is level.



Fit the drive assembly into the cradle. Ensure the washers are in place and fully tighten the 4 nuts to firmly secure the drive assembly in the mounting cradle.

GATE MOTOR INSTALLATION AND SET UP INSTRUCTIONS

Attaching the Arms and Brackets to the Gate

FOR OUTWARD OPENING GATES REFER TO THE SPECIAL INSTRUCTION SHEET

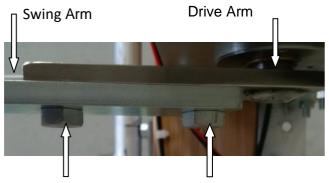
Refer to the "Internal Manual Release" instructions on page 5. Disengage the motor gear by loosening the internal release bolt and push the DC motor away from the gearing. The motor drive arm should now be free to rotate by hand.

Move the gate into the closed position manually.

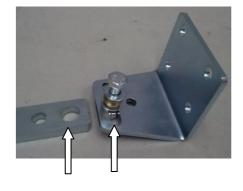
Fit the swing arm assembly to the drive arm. Loosely attach the mechanical latch arm bracket to the other end of the swing arm assembly.

Extend the swing arm straight out and mark a position where the mechanical latch arm bracket touches the gate. Ensure the swing arm is at the end of the slot furthest from the gate motor. Measure approximately 40mm back towards the gate motor from the marked position and attach the mechanical latch swing arm bracket or standard gate bracket to the gate at this point. Tighten the two swing arm bolts with care not to over tighten. Open and close the gate manually

by hand several times to test.



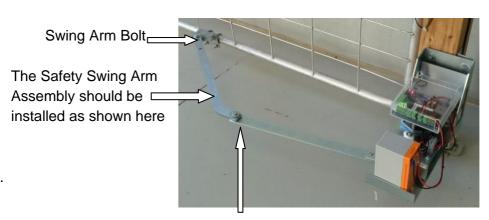
Screw the two 12mm bolts with lock washers (not shown) to attach Swing Arm to the Drive Arm.



Attach the mechanical latch gate bracket (to the end of swing arm using brass olive, bolt and nut. Ensure the bolt is in the slot.



Mechanical Latch Gate Bracket. Ensure the swing arm is at the end of the slot furthest from the gate motor

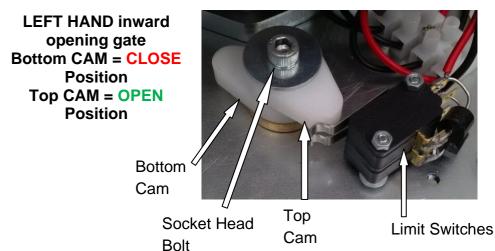


Swing Arm Bolt

Setting Open / Close Limit Switch Cams







RIGHT HAND inward opening gate

Top CAM = CLOSE

Position

Bottom CAM = OPEN

Position

FOR OUTWARD OPENING GATES REFER TO THE SPECIAL INSTRUCTION SHEET

Ensure the Internal Release is disengaged (see page 5).

Manually move the gate into the closed position. Using a 5mm allen key loosen the socket head bolt and rotate the correct cam until it clicks the corresponding limit switch (see above). Retighten the cams.

Manually move the gate into the open position. Using a 5mm allen key loosen the socket head bolt and rotate the correct cam until it clicks the corresponding limit switch (see above). Retighten the cams.

Engage the Internal Release (see page 5). **CAUTION**: **The gate will now open / close when the gate motor is activated.**

Press the handset remote and activate the gate motor to check the gate is stopping at the required open position and closed position. Adjust the cam positions as necessary. Test the gate motor several times to ensure the gate is stopping in the correct positions.

Ensure the gate motor is turning in the correct direction for opening the gate and the GREEN LED light is on OR the correct direction for closing the gate and the RED LED is on as per the pre-installation set up.

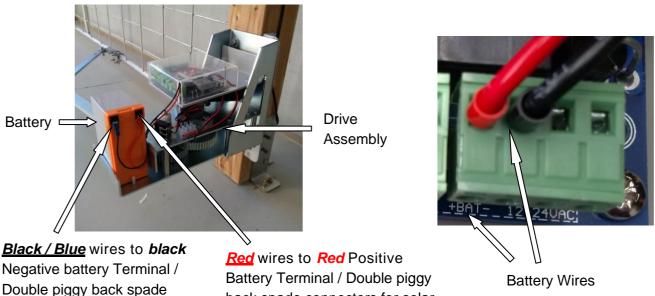
Care should be taken as there are moving components inside the gate motor that may cause damage or personal injury.

Connecting the Circuit Board and Fitting the Battery

ALWAYS TURN THE BATTERY OFF AND DISCONNECT THE BATTERY BEFORE MAKING ANY WIRING CONNECTIONS

Refer to the "DC 2 Circuit Board" data sheet included with this manual or to any reference notes or photos and fit the wires back into the correct terminal locations on the control board.

Fit the battery on its end into the battery space on the drive assembly as shown below.



<u>Black / Blue</u> wires to **black**Negative battery Terminal /
Double piggy back spade
connectors for solar power or
single spade connectors for
transformer power.

Battery Terminal / Double piggy back spade connectors for solar power or single spade connectors for transformer power.

It is recommended that the battery be connected first during this stage of the installation. The primary power source can be connected after all the necessary set-up procedures and adjustments are made. Refer to the "DC 2 Circuit Board" data sheet included with this manual and locate the battery connection terminals on the circuit board. Ensure the battery wires are correctly connected to the correct terminals on the circuit board. Connect the battery wires to the battery terminals on the battery. Note the polarity (Red positive wires to Red battery terminal, Black/Blue) Negative wires to Black battery terminal). The board should now be powered and great care should be taken to avoid shorting out or otherwise damaging the circuit board.

Care should be taken as there are moving components inside the gate operator that may cause damage or personal injury.

WARNING

<u>Care should be taken around the moving gate and any moving components</u> <u>to avoid damage or personal injury.</u>

Setting the Safety Obstruction Sensing / Auto Reverse Adjustment

Refer to the "DC2 Circuit Board" data sheet included with this manual and locate the Motor Force trim pot on the circuit board.

This adjustment controls the motor torque and obstruction sensing of the gate motor. The motor needs to have enough torque (force) to fully open and close the gate. *Maximum motor torque disables the safety obstruction sensing and can damage the gate and gate motor.*

Turn the Motor Force trim pot anti-clockwise to reduce the motor torque (increase sensitivity to an obstruction) or turn the Motor Force trim pot clockwise to increase the motor torque (decrease sensitivity to an obstruction).

Once the gate motor is operating, the Motor Force needs to be set to ensure the gate motor responds if the gate is obstructed. When the gate is opening, use an obstruction to stop the gate and the gate motor should click off and stop the gate. When the gate is closing use an obstruction to stop the gate and the gate motor should click off and then the gate should reopen. Adjust the Motor Force trim pot accordingly.



WARNING

Care should be taken around the moving gate and any moving components to avoid damage or personal injury.

INSTRUCTIONS

DC2 Setting Automatic Close Operation

Refer to the "DC2 Circuit Board" data sheet included with this manual and locate the Auto Close Time Set Push Button marked 'OSC' and Dip Switch 1 and Dip Switch 8 on the circuit board.

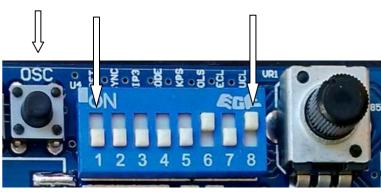
The gate motor is supplied with the Auto Close OFF as standard.

The gate motor can be set to 'Auto Close' by simply flicking DIP switch 1 to ON, press and hold down "OSC" button for the required time you want the gate to remain open before it auto closes, and release the button. For example, if you want the gate to remain open for 30 seconds before it auto closes then press and hold down the "OSC" button for 30 seconds and release the button. Once time is set flick DIP switch 1 back to OFF.

To start the Auto Close function flick DIP switch 8 to ON and leave it on. To disable the Auto Close flick DIP switch 8 back to OFF.

Flick DIP switch 1 to ON and press "OSC" to set the Auto Close time. Flick back to OFF when finished.

Flick DIP switch 8 to ON to start Auto Close or back to OFF to disable Auto Close



<u>functioning.</u>

WARNING

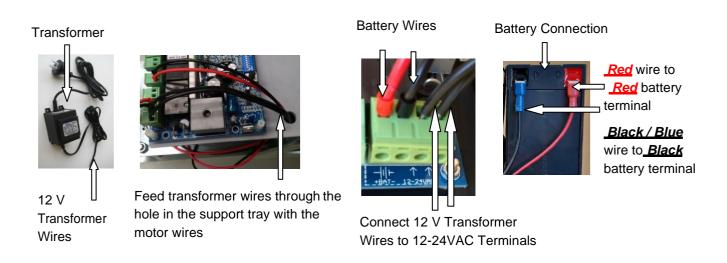
If the 'Auto Close' feature is enabled, then precautions should be taken to ensure the gate can close without hitting any obstructions or suitable safety accessories are also installed.

Regularly check that all safety features and safety accessories are fully

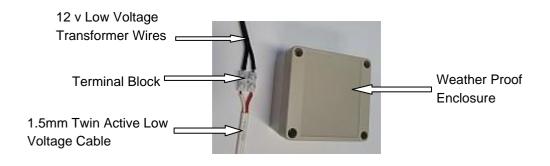
ENSURE THE TRANSFORMER IS SWITCHED OFF AND THE BATTERY AND SOLAR PANEL ARE DISCONNECTED

Refer to the "DC2 Circuit Board" data sheet included with this manual and locate the '12-24VAC' terminals on the circuit board.

Connect the 12 v transformer wires to the '12-24VAC' terminals on the circuit board. There is no positive or negative transformer wire and they can connect to either of the two "12-24VAC' terminals. Connect the battery wires to the battery. <u>Red</u>, Positive wire to <u>Red</u> battery terminal, <u>Black / Blue</u> Negative wire to <u>Black</u> battery terminal. The board should now be powered and great care should be taken to avoid shorting out or otherwise damaging the circuit board. Turn on the transformer, replace the plastic circuit board cover and metal motor cover and test.



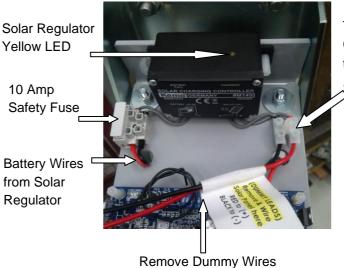
If the 12 v low voltage transformer wires need to be extended then we recommend you use a terminal block / joiner. Place the terminal block / joiners into a small enclosure for protection and outdoor installation.



ENSURE THE SOLAR PANEL IS FULLY COVERED AND THE BATTERY DISCONNECTED

The solar panel is to be connected directly to the terminal block from the regulator and NOT to the circuit board.

Remove the "Dummy" wires and connect the positive and negative solar panel wires to the terminal block from the regulator (grey / red positive wire - grey / black negative wire). Plug the piggyback spade connections to the battery terminals on the battery. Note the polarity (*Red*, Positive wire to *Red* battery terminal, *Black / Blue* Negative wire to *Black* battery terminal). The board should now be powered and great care should be taken to avoid shorting out or otherwise damaging the circuit board. Uncover the solar panel and check the solar regulator yellow LED is glowing. Replace the plastic circuit board cover and metal motor cover and test.



Terminal Block from solar regulator Connect solar Panel Wires **POSITIVE** wire to grey / **red** wire **NEGATIVE** wire to grey / **black** wire



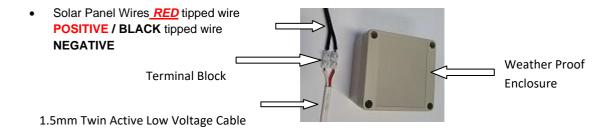
Push to click

holder back in.



Red wires to Red Positive
Battery Terminal / Piggy
Back Spade Connectors.
Black / Blue wires to black
Negative battery Terminal /
Piggy Back Spade
Connectors

If the solar panel wires need to be extended then we recommend you use a terminal block / joiner. Place the terminal block / joiners into a small enclosure for protection and outdoor installation. As a minimum, 1.5mm Twin Active cable should be used to extend the wires.



GREAT MATE - Electric Lock Install Data Sheet

Refer to the installation instructions.

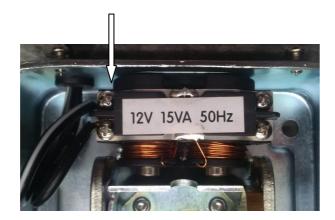
The electric lock needs to be mounted to the end of the gate on the same horizontal rail as the gate motor with the striker plate mounted to the fixed post with a clearance of 5mm (no more than 8mm)

Check the gate motor is turning in the correct direction for opening the gate and the GREEN LED light is on OR the correct direction for closing the gate and the RED LED light is on.

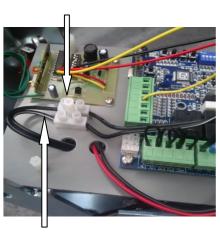
Run a 0.75mm 2 core figure 8 wire down the length of the gate to the lock and connect to the lock wiring terminals as indicated below.

Connect the other end of the wire to the terminal block on the control board support tray.

Lock Wiring Terminals

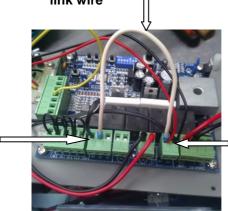


Terminal block connection on support tray for lock wires.



0.75mm 2 core figure 8 wire from electric lock

Electric lock positive link wire



Electric lock trigger wire 'NO' Terminal

Electric lock negative wire terminal 'OV' [Shared with receiver negative wire]

Warranty & Returns - Policy

GENERAL

Product is deemed to be warranted from the date of initial purchase from Sun-Power Auto Gates. Proof of purchase is required when applying for warranty claims.

Warranty is offered on a Back-to-Base Warranty basis. Where issues can't be resolved by your Installer or local Reseller in person, or by Sun-Power Auto Gates staff over the phone, product will need to be returned at Customer Cost to Sun-Power Auto Gates for assessment, repair or replacement.

1 year		DIY Gate Kits	Applicable Kits:
1 year	Accessories		Such as: Push Buttons, Keypads, PE Beams, .
3 months	Spare Parts (exclusive of warranty replacements)		Such as: Control Boards, Receivers, Remote Controls, Limit Switches, DC Motors, etc.

Warranty Periods

Exclusions & Limitations

The warranties stated herein do not cover damage, malfunction or service failures caused by:

Failure to follow Sun-Power Product Installation, Operation or Maintenance Instructions

REPAIR OR MODIFICATIONS TO YOUR SUN-POWER PRODUCT BY SOMEONE OTHER THAN A SUN-POWER SERVICE TECHNICIAN, AUTHORISED INSTALLER OR RESELLER MAY AFFECT YOUR WARRANTY

ABUSE, MISUSE OR NEGLIGENT ACTS MAY AFFECT YOUR WARRANTY

Batteries or Fuses supplied with your Sun-Power product (inc Handset batteries)

Power failure surges, lightning, fire, water damage, pest damage, accidental breakage, actions of third parties and other events or accidents outside of Sun-Power Automatic Gate's reasonable control and not arising from normal operating conditions

Sun-Power Automatic Gates is not responsible for any special, incidental, consequential or punitive damages arising from the use

to lodge a claim, contact Sun-Power on Request 02 6280 4655 or email sales@sungateaustralia.net

Goods are to be returned to Sun-Power Automatic Gates at the Customer's cost. Sun-Power Return Goods will assess returned product within 14 days to determine the extent of warranty cover and likely to Sun-Power repair costs

In-Warranty Repairs will proceed as soon as practicable. The manufacturer's offering the warranty reserves the right to repair or replace product at its discretion. It may, at its discretion. use new, remanufactured, or refurbished parts or products when repairing or replacing product. Replaced parts become the property of Sun-Power Automatic Gates. Repair costs and return freight of in-warranty repairs will be covered free of charge

Repair Replacement of Goods

Non-Warranty Repairs will not proceed until you are notified of estimated Repair Costs, When authorisation and payment details is received from you we will to proceed. Where product is deemed to be unrepairable, and you require goods to be returned to you, then freight costs will need to be pre-paid to Sun-Power prior to return.

Maintenance

- 1. A regular cleaning to remove dust & dirt. A small soft brush will suffice.
 - 2. Approximately every 6 months remove the motor cover, clean carefully with a soft brush and spray the underside of the motor cover. Spray with a surface spray suitable for crawling insects, slugs and snails.

DO NOT USE ANY SPRAY ANY ELECTRONIC COMPONENTS.

- 3. Check Battery terminals for corrosion. If present then clean carefully a wire brush
- 4. Using a small screwdriver, tighten all terminal block screws and ensure any cables are not frayed at the ends.
- 5. Ensure Receiver is firmly mounted.
- 6. Tighten all mounting and attachment bolts.
- 7. Check screws on Push Button covers are intact and tight.
 - 8. If Safety Photo Beams are fitted, remove covers and gently brush any cobwebs, etc. away. Check operation and replace.

Finally, there is usually no substitute for good housekeeping. Ensuring the Motors and the area around the Motors and Gates are free of rubbish, leaves, infestation of insects and trimming of plants will help to give a long and trouble-free life.

Should you be unsure of any points above please contact us 8.30 – 4.00 Monday to Friday other than public holidays

Programming Transmitters

Important: The Radio receiver, Remote Controls and Digital Keypad are generally pre-programmed. Instructions below are for re-programming if necessary.

Remote Control

(TX10)



- 1. Press & release 'LEARN' button On Radio receiver module (red light will turn on)
- 2) Immediately Press preferred button on remote (e.g. 'A' or '1'), and hold for 2 Seconds or until gate begins to drive.
- N.B. Sequence needs to be fairly quick.
 Design & Colour of remote controls may alter



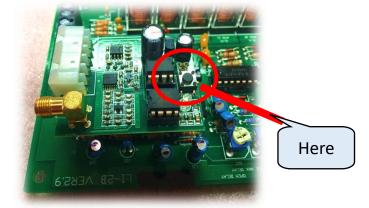
SPXPPB-RAD-2

Wireless Push button with 2 position key switch.

Button active - Button inactive

Program push buttons the same way as Remote Controls

Where is the 'LEARN' BUTTON'?



Wireless Keypad

With code entry (DK50)

For domestic use ONLY



Keypad batteries are fitted with an isolation strip – please remove this strip before using.

- 1) Enter pin code in to keypad (factory default = 1234).
- 2) Press & release 'LEARN' button (red light will turn on)
- 3) Press & hold # Key on keypad until gate motor responds.
- N.B. Sequence needs to be fairly quick.

TO CHANGE KEYPAD'S PIN CODE: Use existing code (e.g. 1234 by factory default).

- 1) Punch in the current code.
- 2) Then press the * key.
- 3) Enter the new code.
- 4) Press the * key again.
- 5) Enter the new code again.
- 6) Press the # key.

When buzzer sounds for 1 second, the change is complete.

Sequence example: 1234*8552*8552#

Troubleshooting Remotes and Keypads/FAQ

I tried changing the pin code on my wireless DK50 keypad. Now I can't remember the new code!

Easily remedied! To reset back to factory default (1234), disconnect the keypad's battery for 15 seconds.

Press and hold the * and # keys together. Keeping them held, reconnect the battery. A 1-second buzzer will sound to confirm the reset. If you get a 3-second beep, you're doing it wrong.

I tried to program a new remote control and/or keypad to the receiver and now NONE of my remote controls work!

Another mistake that is easily remedied! When you tried to program your new transmitter, you held the Learn button down for too long. If held for 6 – 8 seconds (or longer), the receiver will delete all previously programmed transmitters (remotes & keypads etc). This is a security feature that is useful when an employee leaves but takes their access remote with them. In deleting all codes, you have accidentally accessed a function normally reserved for technicians only. Simply reprogram your remotes and this time only hold the Learn button down for 1 - 2 seconds. The Learn sequence needs to be done *quickly*.

I press the button on my remote and the little light on it isn't coming on. My gate won't open either!

Sounds like a flat battery in your remote! Time for a new one. Your local hardware store should have the right battery to suit your remote.

I press the buttons on my keypad but it's not making any beeps like it used to. What do I do?!

Sounds like a flat battery! Time for a new one! Your local hardware store should be able to provide you with replacement batteries.

There's a green LED lighting up on my keypad. Normally it's red. What does that mean?

That's the early-warning light to let you know that your battery is almost completely flat.

We had someone do some work on our fence last week and now my remote control and keypad do not work.

Electric fences can interfere with communication between your transmitters and the receiver module inside your motor. Have you got your aerial connected to your receiver? Is it mounted properly?